Manitoba Water Stewardship

Annual Report 2006-2007

Manitoba

Gestion des resources hydriques
Manitoba

Rapport annuel
2006-2007

Manitoba

MINISTER OF WATER STEWARDSHIP

Legislative Building
Winnipeg, Manitoba, CANADA
R3C 0V8

His Honour The Honourable John Harvard, P.C., O.M.
Lieutenant-governor of Manitoba
Room 235
Legislative Building
Winnipeg MB R3C 0V8

Your Honour:

I am pleased to present the Annual Report of Manitoba Water Stewardship for the year ending March 31, 2007.

Manitoba Water Stewardship is committed to the complex goals of: protecting aquatic ecosystem health; restoring and preserving the societal and economic values of our waterways, lakes and wetlands; and, managing water use for human needs for today and for the future. These goals involve the engagement of the best science and the effective input of water-resource-based industries and all Manitobans.

I was pleased to receive the Lake Winnipeg Stewardship Board's report and recommendations, "Reducing Nutrient Loading to Lake Winnipeg and its Watershed", in December 2006 and advise that we have initiated action on over 84% of the broadly based report's recommendations.

The Department's Annual Report details the Department's many accomplishments over the past fiscal year.

- Consultations were concluded on the proposed Nutrient Management Regulation under the Water Protection Act to establish and implement water quality management zones for nutrient level management that will contribute to the health of Lake Winnipeg.

- Regulations were also implemented under the Act to establish clear water quality standards that are to be met by public and semi-public water systems, and will result in safer drinking water.

- Integrated watershed management planning continues to advance through addition of and support to Water Planning Authorities. Six new authorities were designated under the Water Protection Act in 2006/07. The Swan Lake

Watershed Conservation District was established as the province's 18th Conservation District.

- Continuing to challenge and monitor developments on water projects that pose a threat to Manitoba waters including the Devils Lake Outlet and continued vigilance in education and inspection activities to prevent the transfer of invasive species.

- Scientific research was also applied to identify E. coli at Lake Winnipeg beaches to protect human health and to research underlying causes and better models for predicting levels in future.

- The protection of water bodies also benefits our recreational and commercial fisheries and the Department's fisheries monitoring and management programs continued to ensure that fish stocks remain healthy and viable for future generations. We also recognized the contributions made be generations of fishers through the first Long Service Fisher Awards. Ninety-nine fishers, many of First Nations, Aboriginal or Icelandic descent, were honoured for their over 50 years of cultural and economic contribution to our Province.

We are privileged to have an abundance of high-quality water in Manitoba to support our environment, economy and society and I am pleased to report on the Department's accomplishments in the stewardship of this resource for current and future generations.

Respectfully Submitted,

C. Melnick

Christine Melnick
Minister of Water Stewardship

Manitoba

Deputy Minister of
Water Stewardship

Legislative Building
Winnipeg, Manitoba
Canada
R3C 0V8

The Honourable Christine Melnick
Minister of Water Stewardship
Room 314, Legislative Building
Winnipeg MB R3C 0V8

Dear Minister:

I am pleased to provide the Annual Report of Manitoba Water Stewardship for the year ending March 31, 2007.

The Report profiles the accomplishments of the Department that contribute to the safety, security, and management of the Province's water resources. Detailed information on programs, their objectives and key results is reported along with statistical information related to key activities and performance measures.

Respectfully Submitted,

A/Deputy Minister of Water Stewardship

HIGHLIGHTS 6

Administration and Finance 12

Minister's Salary 12
Executive Support 12
Administration and Finance 12
Information Technology Services 15

ECOLOGICAL SERVICES 17

Administration 17
Planning and Coordination Branch 17
Conservation District Secretariat Section 21
Water Science and Management Branch 23
Groundwater Management Section 24
Surface Water Management Section 26
Water Quality Management Section 27

FISHERIES BRANCH 29

Fisheries Administration 29
Aquatic Eco-system Management 30
Sport and Commercial Fishing Management 33
Regional Fisheries Resources 36
Northern Fishermen's Freight Assistance 39
Fisheries Enhancement Initiative 40

Office of Drinking Water 49

INFRASTRUCTURE AND OPERATIONS 54

Administration 54
Water Licensing 54
Water Control Infrastructure 55
Regional Water Operations 56
Waterway Maintenance 57

Water Stewardship Initiatives 58

Minor Capital Projects 63

Costs related to Capital Assets 64

Desktop Services 64
General Assets 64

Part B CAPITAL INVESTMENT 65

General Assets 65

Sustainable Development Activities and Accomplishments 66

Activités et réalisations au chapitre du développement 71

Revenue and Expenditure Summaries 77

WATER STEWARDSHIP – Performance Reporting Table 84

GESTION DES RESSOURCES HYDRIQUES MANITOBA – Tableau d'information sur le rendement 2006-2007 96

LEGISLATION 106

Publications 107

List of Tables

AF.1 Expenditure, Minister's Salary 12
AF.2 Expenditure, Executive Support 12
AF.3 Employment Equity Representation 15
AF.4 Expenditure, Administration & Finance 15
AF.5 Expenditure, Information Technology 16 Services 16
EC.1 Expenditure, Ecological Services, Administration 17
EC.2 Expenditure, Planning and Coordination 21
EC.3 Expenditure, Community and Watershed Assistance 23
EC.4 Expenditure, Water Science and Management Branch, Administration 24
EC.5 Expenditure, Groundwater Management 26
EC.6 Expenditure, Surface Water Management 27
EC.7 Expenditure, Water Quality Management 28

FI.1 Expenditure, Fisheries Branch, Administration 30
FI.2 Distribution to Sport Fishing Waters from Fish Hatcheries 32
FI.3 Expenditure, Aquatic Ecosystem Management 33
FI.4 Expenditure, Sport and Commercial Fishing Management 35
FI.5 Expenditure, Regional Fisheries Resources 39
FI.6 Expenditure, Northern Fishermen's Freight Assistance 40
FI.7 Expenditure, Fisheries Enhancement Initiative 40
FI.8 Fishers Employed in Manitoba Commercial Fishery, 2005/06 41
FI.9 Commercial Fishing Production (round Kg), Total Value and Number of Licensed Fishers, 1996/97 to 2005/06 42
FI.10 Commercial Fishing Production (round weights kg) by Area and Total Value by Species, 2005/06 43
FI.11 Angling Licence Sales and Revenue 1993/94 to 2005/06 44
FI.12 Bait Fishing Industry Statistics 46
FI.13 Manitoba Fish Farming Statistics 47
FI.14 Fisheries Monitoring 2006/07 48

DW.1 Expenditure, Office of Drinking Water 53

IO.1 Expenditure, Infrastructure and Operations, Administration 54
IO.2 Expenditure, Water Licensing 55
IO.3 Expenditure, Water Control Infrastructure 56
IO.4 Expenditure, Regional Water Operations 57
IO.5 Expenditure, Waterway Maintenance 57

WS.1 Expenditure, Water Stewardship Initiatives 62

MC.1 Expenditure, Minor Capital Projects - Water Projects 63

CI.1 Expenditure, Desktop Services 64
CI.2 Expenditure, General Assets 64

CA.1 Expenditure, General Assets 65

RE.1 Reconciliation Statement 77
RE.2 Revenue Summary by Source 78

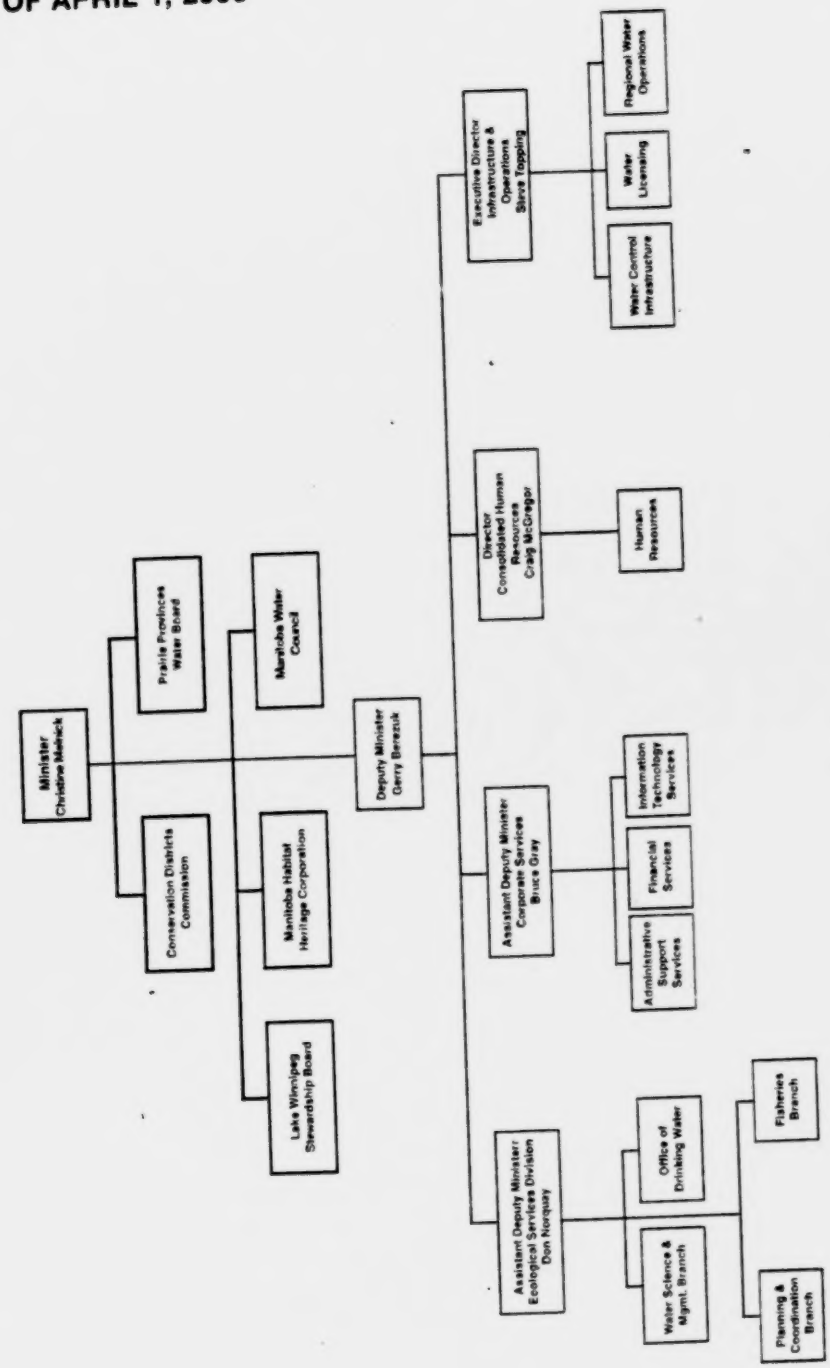
EX.1 Expenditure Summary 79
EX.2 Five-Year Expenditure and Staffing Summary by Appropriation 83

LIST OF FIGURES

Organization Chart 4
Organigramme 5

FIGURE 1

WATER STEWARDSHIP ORGANIZATION CHART AS OF APRIL 1, 2006



GESTION DES RESSOURCES HYDRIQUES MANITOBA ORGANIGRAMME EN VIGUEUR LE 1er AVRIL, 2006

HIGHLIGHTS

Ecological Services

- Six new Water Planning Authorities were designated as per *The Water Protection Act* and planning and coordination assistance was provided to the seven authorities currently working on the development of integrated watershed management plans.

- The Department established the Manitoba Water Council to provide Ministerial advice on policies, programs, plans and legislation needed to achieve Manitoba Water Stewardship's vision of "the best water for all life and lasting prosperity". The Council will help build a broad-based consensus among Manitobans on sustainable solutions for water protection and water management.

- The Conservation Districts Program continued building provincial/municipal partnerships in watershed management with total water protection expenditures exceeding $7.0 million of which $4.4 million was provincial Conservation District (CD) grants. The Swan Lake Watershed CD became Manitoba's 18th CD. Five CDs were designated Water Planning Authorities to undertake integrated watershed planning. Staff coordinated workshops building capacity in watershed governance, planning and responsibilities of provincial appointees and continued liaison with 26 municipal authorities drafting CD formation, expansion, and merger proposals. Water Stewardship partnered with Conservation Districts to initiate seven Watershed Plans in fiscal year 2006/07.

- Consultations were concluded on the proposed Nutrient Management Regulation under *The Water Protection Act* to establish and implement water quality management zones for nutrients. In addition, the development of the regulation establishing Water Quality Standards, Objectives, and Guidelines was initiated in fiscal year 2006/07 and extended to fiscal year 2007/2008. In the future, additional regulations will be developed under the Water Protection Act including those required to protect riparian areas, to protect against invasive species, plus others.

- Departmental leadership and Input on several fronts continued to protect Manitoba's aquatic resources and environment from impacts arising from transboundary water projects such as Devil's Lake.

- Additional long-term water quality monitoring stations were established in collaboration with several Conservation Districts across Manitoba. The Water Quality Index was calculated for each new water quality monitoring station and will be used as input to watershed planning and state of the watershed reporting.

- Specific research is continuing to be conducted to identify the main source of *E. coli* at Lake Winnipeg beaches and the mechanism by which *E. coli* are transferred from this source to bathing areas. The goal of much of this work is to protect human health, provide scientific data to support management decisions, and provide sufficient scientific data to support a model that will provide the bathing public with real-time, daily predictability of *E. coli* levels.

Fisheries Branch

- Summary reports outlining fishery information including the status of fish habitat health were provided for on-going integrated watershed planning initiatives on the Seine River, La Salle River, and Icelandic River watersheds.

- Fisheries Branch, working in conjunction with regional fisheries staff, developed recreational, commercial, and bait fisheries program plans to address conservation and allocation issues that affect the management of Manitoba's recreational and commercial fisheries while ensuring fish stocks remain healthy and viable for future generations.

- Cedar Lake fishery has been restructured with a $1.6 million quota adjustment initiative and a new management plan following a voluntary 5 year closure. The $1.6 million was available in order to rationalize 40 commercial fishing licenses and restructure the operations of the fishery to secure its long-term commercial viability. The fish stocks did rebound and the management plan includes the community "Resource Management Board" being consulted on management actions and changes (as opposed to just the commercial fishers association). Production has been reasonable but strong evidence of sustained stock recovery has not yet been seen.

- The sustainable development education website was enhanced to further integrate sustainable development concepts into the new Kindergarten to Grade 12 Manitoba Science Curriculum. The site was promoted at Manitoba Education workshops, seminars and conferences (including the provincial Special Area Groups Science convention), and educational institutions throughout the province. The site provides educators and students with on-line fisheries information and grade-specific exercises to meet prescribed outcomes.

- The Department completed reviews of all regional environmental licensing proposals, land use applications, development proposals and scientific collection permit applications. Fisheries Branch input into these reviews is critical to ensuring the long term sustainability of fisheries and fish habitat in the region.

- The Department reviewed Wuskwatim Generating Station road construction and evaluated the suitability of license and permit conditions. This project was subject to an extensive environmental review process and is the first of several developments in various stages of planning.

- The Department participated in the Hydro Turbine Fish Passage Study at Kelsey generating station. This is a multi-year Manitoba Hydro funded project researching the impact of fish passage through turbines. Kelsey GS is currently upgrading its turbines to a newer, more efficient design. Passage through the original turbines was assessed this year. The study will be repeated next year after the first of the new turbines is installed.

- Participated in the Nelson River Sturgeon Board (NRSB) and managed their field program. Field operations were limited by continuing high water levels and flows on the Nelson River. The Board completed grant applications for next year which are intended to increase both its field program and its outreach and education programs. The Board operates a continuing program to raise sturgeon fingerlings. This year approximately 2,500 sturgeon were hatched at Grand Rapids Hatchery and eventually raised to fingerling size and released into the Nelson River.

- The Fisheries Enhancement Fund was introduced in March 2007, a significant enhancement to existing programming into new categories of: fisheries research; fish stock assessment and monitoring; fisheries development, by way of capital investment and stocking; fisheries habitat rehabilitation and enhancement; and education initiatives pertaining to fisheries. The project review committee will include broader representation from a number of associations and stakeholders who have an interest in enhancing Manitoba's fisheries.

Office of Drinking Water

- Monitoring of public water systems on an on-going basis to ensure safety of water supplies. 90% of all water systems currently comply with the required testing schedule. These systems provide the water to 90% of Manitoba's population. Progress has been made rapidly since the level of 72% compliance in 2003.

- Two regulations under [*The Drinking Water Safety Act]* were enacted on March 1, 2007. The Drinking Water Quality Standards Regulation and the Drinking Water Safety Regulation establish clear water quality standards, including bacterial and microbial levels that are to be met by public and semi-public

(small systems with less than 15 service connections, e.g. restaurants, hospitals, daycares) water systems.

Infrastructure and Operations

In September 2006, infrastructure-delivery functions of Water Stewardship were transferred to the Department of Infrastructure and Transportation (MIT). This re-organization will provide integrated infrastructure project delivery in MIT with respect to engineering services, tender process and project management. Water Stewardship will continue to support the policy and planning processes that address the environmental, social and economic value of water and protection of health and property from water-related hazards. This will include input into infrastructure-delivery services of MIT to address overall priorities such as flood protection, effective drainage and water control structure management.

- Prior to the reorganization the maintenance and capital works programs for maintaining, refurbishing and reconstruction of a number of water control works were developed, and direction was provided with respect to their implementation and with respect to matters of budget. The works include waterways, water crossings, water control structures, dams and dikes. Engineering design and technical support was provided for a number of infrastructure projects.

- Manitoba committed to work with municipalities between the City of Winnipeg and Lake Winnipeg to operate the Amphibex in order to break ice immediately prior to normal spring melt in order to minimize the potential for local flooding due to ice-jams.

- The Department has now established a dedicated Water Control Works and Drainage Licensing Branch with 25 staff including 14 new Water Resource Officers who will be located at various locations in rural Manitoba. Six of these new positions were established in 2006/07.

POINTS SAILLANTS

Services écologiques

- Six nouveaux organismes de planification des eaux ont été désignés conformément à la *Loi sur la protection des eaux*, et de l'aide à la planification et à la coordination a été fournie aux sept organismes travaillant actuellement à la conception de plans de gestion intégrés des bassins hydrographiques.

- Le ministère a établi le Conseil des eaux du Manitoba afin qu'il conseille le ministre sur les politiques, programmes, plans et dispositions législatives nécessaires pour réaliser la vision de Gestion des ressources hydriques Manitoba : « La meilleure eau pour toute la vie et une prospérité durable ». Le Conseil aidera à créer un consensus à grande échelle au sein de la population manitobaine à propos des solutions durables pour résoudre les questions de protection et de gestion des eaux.

- Des partenariats ont continué d'être établis entre la Province et les municipalités à propos de la gestion des bassins hydrographiques, dans le cadre du Programme des districts de conservation, avec des dépenses totales consacrées à la protection des eaux dépassant sept millions de dollars, dont 4,4 millions de dollars versés en subventions aux districts de conservation de la province. Le district de conservation du bassin de drainage de Swan Lake est devenu le 18e district de conservation du Manitoba. Cinq districts de conservation ont été désignés comme organismes de planification des eaux pour entreprendre une planification intégrée des bassins hydrographiques. Le personnel a coordonné des ateliers à l'intention des personnes nommées dans les provinces, renforçant les capacités en matière de responsabilités liées aux bassins, et de gouvernance et de planification des bassins hydrographiques, et a continué d'assurer la liaison avec 26 administrations municipales qui préparent des projets de création, d'expansion et de fusion de districts de conservation. Gestion des ressources hydriques a collaboré avec des districts de conservation pour mettre en œuvre sept plans de gestion des bassins hydrographiques durant l'exercice 2006-2007.

- Les consultations sur le projet de création d'un règlement en matière de gestion des nutriants conformément à la *Loi sur la protection des eaux* ont été menées à terme. Ce règlement régirait l'établissement et la mise en œuvre des zones de gestion de la qualité de l'eau pour les nutriants. En outre, la création du règlement établissant les normes de qualité, les objectifs et les directives a été initiée durant l'exercice 2006-2007 et prolongée jusqu'à l'exercice 2007-2008. Dans l'avenir, d'autres règlements seront conçus conformément à la *Loi sur la protection des eaux*, y compris ceux qui sont nécessaires à la protection des zones riveraines et à la protection contre les espèces envahissantes.

- Le leadership du ministère et sa participation dans plusieurs domaines ont continué à protéger les ressources aquatiques et l'environnement du Manitoba contre les effets découlant de projets d'eaux transfrontaliers, comme celui du lac Devils.

- D'autres postes de surveillance à long terme de la qualité de l'eau ont été établis en collaboration avec plusieurs districts de conservation du Manitoba. L'indice de la qualité de l'eau a été calculé pour chaque nouveau poste de surveillance, et sera utilisé pour la planification des bassins hydrographiques et la communication de l'état des bassins.

- Des recherches précises sont toujours en cours afin de déterminer la principale source de *E. coli* dans les eaux des plages du lac Winnipeg et la façon par laquelle cet organisme se déplace de la source d'origine aux régions de baignade. Le but de la plupart de ces travaux est de protéger la santé humaine, de fournir des données scientifiques qui serviront à la prise de décisions en matière de gestion, et de collecter suffisamment de données scientifiques pour créer un modèle qui procurera aux baigneurs une prévision quotidienne des niveaux de *E. coli* en temps réel.

Direction de la pêche

- Des rapports sommaires présentant de l'information sur la pêche, y compris l'état de l'habitat du poisson, ont été préparés pour les initiatives intégrées continues de gestion des bassins hydrographiques sur les bassins des rivières Seine, Sale et Icelandic.

- La Direction de la pêche, conjointement avec le personnel des organismes de pêche régionaux, a conçu des plans de programmes pour la pêche récréative, commerciale et avec poisson-appât, visant à résoudre les questions de conservation et de répartition qui touchent la gestion des pêches récréatives et commerciales au Manitoba, tout en veillant à ce que les stocks de poissons demeurent sains et durables pour les générations futures.

- À la suite de sa fermeture volontaire pendant cinq ans, la pêcherie du lac Cedar a été restructurée au moyen d'une initiative de réajustement des quotas de 1,6 million de dollars et d'un nouveau plan de gestion. Les stocks de poissons ont remonté, et le plan de gestion prévoit la consultation du conseil communautaire de gestion des ressources en ce qui concerne les mesures à prendre et les modifications de gestion (plutôt que de seulement consulter l'association des pêcheurs commerciaux). La production des stocks de poissons a été raisonnable mais nous ne disposons pas de preuves solides que leur rétablissement est durable.

- Le site Web sur l'éducation en matière de développement durable a été amélioré en vue d'intégrer davantage de concepts sur le développement durable dans le nouveau programme d'études de sciences du Manitoba, de la maternelle à la 12e année. On a fait la promotion du site Web lors d'ateliers, de séminaires et de conférences d'Éducation Manitoba (y compris la convention provinciale scientifique des groupes de secteurs spéciaux), ainsi que dans des établissements d'enseignement à l'échelle de la province. Sur le site, les éducateurs et les élèves trouveront des renseignements sur les pêcheries et des exercices en ligne adaptés à chaque niveau scolaire afin d'atteindre les résultats d'apprentissage prescrits.

- Le ministère a terminé l'examen de toutes les propositions régionales d'obtention de licences environnementales, les demandes d'utilisation des terres, les propositions d'aménagement et les demandes de permis pour la collecte scientifique. La participation de la Direction de la pêche à ces examens est critique pour garantir la durabilité à long terme de la pêche et de l'habitat du poisson dans la région.

- Le ministère a examiné le projet de construction de route à la centrale électrique Wuskwatim et a évalué la pertinence des conditions des licences et des permis. Ce projet a fait l'objet d'un processus d'examen approfondi des effets environnementaux et constitue le premier aménagement parmi plusieurs autres projets se trouvant à diverses étapes de planification.

- Le ministère a participé à l'étude sur le passage des poissons dans les turbines hydroélectriques de la centrale électrique de Kelsey. Ce projet pluriannuel financé par Hydro-Manitoba permet d'effectuer des recherches sur les conséquences du passage des poissons dans les turbines. La centrale électrique Kelsey procède actuellement à la modernisation de ses turbines selon un nouveau plan plus efficace. Le passage dans les turbines d'origine a été évalué cette année. L'étude sera répétée l'année prochaine après que les premières nouvelles turbines auront été installées.

- Le ministère a participé aux activités du Nelson River Sturgeon Board et a géré le programme sur le terrain de ce dernier. Les opérations sur le terrain étaient limitées en raison du débit rapide et des niveaux d'eau élevés constants de la rivière Nelson. Le Nelson River Sturgeon Board a présenté des demandes de subventions pour l'année prochaine qui serviront à agrandir à la fois son programme sur le terrain et ses programmes d'approche et d'éducation. Il gère un programme permanent d'élevage d'alevins d'esturgeons. Cette année, environ 2 500 esturgeons ont éclos à l'écloserie de Grand Rapids; ils ont ensuite été élevés jusqu'à ce qu'ils atteignent la taille d'alevins, puis ont été relâchés dans la rivière Nelson.

Service de l'eau potable

- La surveillance des réseaux publics d'alimentation en eau est effectuée de manière continue afin d'assurer la qualité des approvisionnements en eau. Actuellement, les calendriers d'examens obligatoires sont respectés dans 90 % de tous les réseaux d'alimentation en eau. Ces réseaux fournissent de l'eau à 90 % de la population du Manitoba. Des progrès rapides ont été faits depuis 2003, année durant laquelle le niveau de conformité était de 72 %.

- Deux règlements d'application de la *Loi sur la qualité de l'eau potable* ont été promulgués le 1er mars 2007. Le *Règlement sur les normes de qualité de l'eau potable* et le *Règlement sur la qualité de l'eau potable* établissent des normes précises de la qualité de l'eau, dont les normes bactériologiques et microbiennes que doivent respecter les réseaux publics et semi-publics d'alimentation en eau (petits réseaux de moins de 15 branchements d'eau, comme les restaurants, les hôpitaux, les garderies).

Infrastructures et opérations

En septembre 2006, la prestation des services liés à l'infrastructure du ministère de la Gestion des ressources hydriques a été transférée au ministère de l'Infrastructure et des Transports. Cette restructuration permettra une prestation intégrée des projets d'infrastructure au sein du ministère de l'Infrastructure et des Transports, en ce qui concerne les services d'ingénierie, le processus d'appels d'offres et la gestion des projets. Le ministère de la Gestion des ressources hydriques continuera d'appuyer les processus de politique et de plannification qui traitent de la valeur environnementale, sociale et économique de l'eau, ainsi que de la protection de la santé et des biens contre les danges liés à l'eau. Cela incluera sa participation à la prestation des services liés à l'infrastructure du ministère de l'Infrastructure et des Transports afin de déterminer les priorités globales comme la protection contre les inondations, le drainage et la gestion efficaces de l'ouvrage régulateur des eaux.

- Avant cette restructuration, les programmes d'entretien et de travaux d'immobilisations pour l'entretien, la remise à neuf et la reconstruction d'un certain nombre d'ouvrages de régularisation des eaux ont été conçus, et des directives ont été émises concernant leur mise en œuvre et les questions de budget. Les travaux comprennent des voies d'eau, des ouvrages de franchissement de cours d'eau, des ouvrages de régularisation des eaux, des barrages et des digues. On a offert de l'aide à la conception technique et du soutien technique à un certain nombre de projets d'infrastructure.

- Le Manitoba s'est engagé à collaborer avec les municipalités situées entre la ville de Winnipeg et le lac Winnipeg quant à l'utilisation de la broyeuse Amphibex pour briser la glace immédiatement avant la fonte normale du printemps en vue de minimiser les possibilités d'inondations locales créées par les embâcles.

Administration and Finance

The Administration and Finance Division provides executive management of programs and management services, including financial, human resource, computer, and administrative support.

Minister's Salary

The Minister's salary provides the Minister with additional compensation to which an individual appointed to Executive Council is entitled.

Table AF.1
25.1(a) Minister's Salary

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	32.5	1.00	30.4	2.1	
Total Sub-Appropriation	32.5	1.00	30.4	2.1	

Executive Support

This area comprises support staff in the offices of the Minister and Deputy Minister of Manitoba Water Stewardship.

The purpose of Executive Support is to develop, implement and oversee policies and programs which are designed to attain, over the long term, the goals set out in the department's role and mission statement, advise the Minister on matters relating to the department, provide policy direction for departmental programs, co-ordinate departmental communications activities and initiatives, and provide administrative support for the offices of the Minister and Deputy Minister.

Table AF.2
25.1(b) Executive Support

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	489.9	8.00	487.1	2.8	
Other Expenditures	132.3		199.0	(66.7)	1
Total Sub-Appropriation	622.2	8.00	686.1	(63.9)	

1. Under expenditure due to higher than anticipated vacancies.

Administration and Finance

Administration and Financial Services are corporate services shared with the Department of Conservation including administrative, financial, information technology, workplace safety and health, equipment warehouse, library and public information services. The Corporate Services Division also processes and administers angling licences. Human Resources services are provided through a service shared with other departments.

Administrative services include: fleet vehicle coordination; office accommodation and parking administration; records management; and coordination of departmental efforts at French language services and compliance

with the Freedom of Information and Protection of Privacy Act. 197 requests under the Freedom of Information and Privacy Act were received in 2006.

Financial services include: processing of revenue and expenditures in accordance with the legislative, government and departmental requirements; preparing financial forecasts and budgetary estimates; asset management; and overall comptrollership support.

The **Conservation and Environment Library** supports access to print and electronic specialized information resources for Manitoba Conservation, Manitoba Water Stewardship, Environment Canada in Winnipeg, the Canadian Council of Ministers of the Environment, and for the public. Interlibrary loans are coordinated with other Manitoba libraries and educational institutions. Current information related to the mandates of each partner organization is made available to staff and to the public. In 2006/2007, the library responded to over 2,500 inquiries for information.

Draws for Manitoba residents are conducted each year to allocate hunting opportunities for elk and moose in areas of limited availability. The annual multi-year priority licence draw system was again conducted with 7,949 applicants and 4,733 licences were awarded.

The Public Information section is responsible for providing information to the public regarding the numerous programs delivered by the Departments of Conservation and Water Stewardship. This service is provided in person, by telephone, Internet and mail. The section responded to the following requests for information and assistance:

- 45,035 direct telephone requests to the Information Officers
- 40,743 calls were received by the automated Public Information Line of which 9,033 where handled directly by the line.
- 74,115 in person requests
- 843 requests through the Internet
- 5,650 information packages mailed.

The Workplace, Safety, Health and Risk Management section provides leadership, direction and support to the departments and senior management on compliance with recognized standards in these areas through policies, monitoring and training.

The Workplace Safety and Health coordinated input and prepared drafts of a comprehensive policy manual that was scheduled for release prior to summer seasonal operations.

Contract Management Section

During the 2006/2007 fiscal year, the Contract Management Section administered contracts for:

- Construction
- Engineering
- Environmental Consulting
- Fee for Service Agreements and
- Others

During the 2006/2007 fiscal year, the Contract Management Section administered grants to organizations from several funds:

- Special Conservation Fund
- Fisheries Enhancement Initiative
- Northern Development Strategy Fund
- Water Stewardship Fund
- General Program Grants

During the 2006/2007 fiscal year the Contract Management Section provided:

Advice and Support to Departmental Staff regarding contractual obligations, including:

- Tendering/Bid opening advice and support
- Verification of contractor insurance and bonding
- Contract/Grant monitoring, review, and payment
- Consolidation and legal review of contract templates
- Grant Accountability advice and support
- Specialized financial reports for:
  - Departmental Executive
  - Provincial Auditors
  - Manitoba Finance
  - Treasury Board
  - Contractors and Consultants

The **Computer Graphics** unit provides Geographic Information System (GIS), graphic design and Computer Aided Design and Drafting (CAD) services to Manitoba Conservation and Manitoba Water Stewardship. The GIS component of Computer Graphics is responsible for providing expertise in the creation of spatial data, spatial data analyses, and preparation of customized geo-referenced maps. The Graphic Design component produces informational material required for internally supporting various programs, policies, and initiatives. Specialized CAD services include preparation of engineering plans for capital works and infrastructure maintenance projects.

The following key activities were carried out 2006/07:

- Maintained and improved the Red River Flood Management System, a web-based decision support system, designed to improve the ability of emergency managers, flood fighters, and valley residents to respond to future flood events.

- Continued work on the National Hydrology data including topological edits and creation of network data.

- Provided project management services for the Assiniboine River and Lake Winnipeg shoreline LiDAR (Light Direction and Ranging) projects.

- Provided project management services for the MAPS project. This is an Internet based tool for use in Manitoba's Watershed Authorities as well as at it's partners, Ducks Unlimited and PFRA.

- Performed analysis and produced mapping for Manitoba Water Quality Management Zones.

- Provided assistance to Conservation Districts program in creating boundary geospatial layers.

- Supported Water Stewardship by preparing location plans for the production wells at various towns, farms and industrial operations. Also provided mapping services to support Drainage licensing. Prepared location maps for Environmental Approval Branch as part of newspaper advertisement for public hearings.

- Supported Waterway Maintenance program by preparing construction drawings required for tendering the maintenance and refurbishment of water control infrastructure e.g., Netley Creek, Hatchery Drain and Grassmere Creek. In addition, also prepared preliminary engineering plans for Kilkenny Drain, Fish Lake Drain, Melob Drain and Wavey Creek.

Human Resources Services are shared with other departments on a sector basis. Statistics that are specific to Water Stewardship are as follows:

Staffing

- There were 79 staffing actions of which 14 were through competitive appointments; 4 direct appointments; 8 acting status appointments; 3 lateral transfer appointments; 45 term & departmental

appointments and 5 other staffing transactions. In addition, HR processed 15 term extensions throughout the year. Guidance and advice were provided on 52 Departmental (seasonal) Employee. Managers are delegated to recall and recruit for Departmental Employee positions. There were no selection appeals.

- Assisted in the development of a Career Gateway for Members of Visible Minority agreement with the CSC and subsequent recruitment.

Labour/Employee Relations

- Provided guidance and advice to management on 6 labour relations issues, including appropriate course of actions and negotiating settlements or resolutions to resolve issues before the formal grievance stage. There were two formal grievances initiated and they are currently in progress.

Classification

- As of March 31, 2006 30 position classifications were reviewed and completed. There were no appeals.

Employment Equity

- Employment Equity continues to be a consideration in all staffing & acting status activities.
- Liaison with schools and organizations to promote careers within the department.
- Participation at a number of Career Fairs.

Table AF.3
Employment Equity Representation as of March 31st 2005, 2006 & 2007

Fiscal Year	Total		Male		Female		Aboriginal		Persons with Disability		Visible Minority	
	#	%	#	%	#	%	#	%	#	%	#	%
2005	282	100	230	81.6	52	18.4	27	9.6	5	1.8	15	5.3
2006	284	100	225	79.23	59	20.8	33	11.6	8	2.8	12	4.2
2007	173	100	122	70.5	51	29.5	21	12.1	5	2.9	7	4.0
Gv't Goal				50.0		50.0		14.0		7.0		8.0

Table AF.4
25.1(c) Administration and Finance

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	156.2	5.00	269.0	(112.8)	1
Other Expenditures	20.7		70.5	(49.8)	2
Total Sub-Appropriation	176.9	5.00	339.5	(162.6)	

1. Under expenditure is due to delay in filling approved positions and related benefits.
2. Under expenditure is due to associated costs budgeted for the Manager and Financial Officer for Capital Asset Planning positions that were not filled in 2006/07.

Information Technology Services

This Branch provides internal information technology service and expertise, including systems analysis, design, implementation, corporate database management, and development and management of a yearly department-wide information technology systems plan. These services are provided by staff which are now located in Science, Technology, Energy and Mines.

Major activities

- Several new software enhancements were completed on various departmental business applications including the Environmental Management System (EMS) for Drinking Water, the water licensing application, and the migration of the application for the collection of stream and river water flow data, and enhancements to the well drilling software package.
- A new large format scanner was installed for the scanning of thousands of large format plans and drawings so that these may be electronically stored and retrieved on the desktop rather than utilizing the paper map products.

Table AF.5
25.1(d) Information Technology Services

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	316.1	1.00	304.4	11.7	
Other Expenditures	12.9		13.9	(1.0)	
Total Sub-Appropriation	329.0	1.00	318.3	10.7	

ECOLOGICAL SERVICES

Administration

Staff provides the necessary direction and program coordination for the Ecological Services Division to ensure sustainable development, allocation and conservation of water resources by developing new policy direction and adhering to current policy and procedures. Staff oversees funding, negotiates and administers contracts and monitors efficiency and effectiveness of expenditures.

Table EC.1
25.2(a) Administration

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	262.5	3.00	261.8	0.7	
Other Expenditures	95.7		117.9	(22.2)	1
Grants	14.3		25.0	(10.7)	
Total Sub-Appropriation	372.5	3.00	404.7	(32.2)	

1. Under expenditure is due to reduced travel and conferences expenses as a result of timing restrictions.

Planning and Coordination Branch

The Planning and Coordination Branch, through the four sections of Watershed Planning, Conservation Districts Secretariat, Information and Knowledge Management, and Policy and Legislation, leads, directs and coordinates:

- the strategic planning process of the Department of Water Stewardship;
- the development of provincial water policy and legislation;
- the provision of advice and secretariat support to the Manitoba Water Council;
- the implementation of the watershed planning provisions of *The Water Protection Act*;
- the provision of advice and support to Conservation Districts Boards to enable the effective delivery of their mandate to deliver conservation-based soil and water programs within local communities;
- the development of basin, aquifer and major water body sustainable management plans; and
- the review of proposed developments to ensure consistency with legislative requirements and approved watershed plans.

The following table provides a summary of the activities of the Branch.

Policy and Legislation

Proposals Received and Processed	#
Environment Act / Draft Licences	101
Development Plans/Basic Planning Statement/Zoning	121
Manitoba Rural Infrastructure	41
Highways and Transportation	12
Special Proposals	8
Subdivision Applications	425
Crown Lands transactions	240
Permits to build in RR Valley Designated Flood Area	20

Conservation Districts and Watershed Planning

Activity	#
New Conservation Districts formed (18th CD Swan Lake Watershed)	1
Conservation Districts expanded Seine Rat River–RM of DeSalaberry, RM of Ritchot, Village of St. Pierre Jolys and Village of Ste. Anne East Interlake–RM of St. Andrews	2
New Conservation Districts draft proposals	4
Integrated Watershed Management Plans In Progress	7
Integrated Watershed Management Plans Completed (Turtle Mountain CD – East Souris River Plan)	1
Surface Water Management Plans Initiated	4

Information and Knowledge Management

Activity	#
Web site inquiries	340
Watershed Map Distribution – School, CDs, Various Events	2,850

Watershed Planning Section

This Section coordinates community-based watershed and aquifer management planning. The section is developing and implementing integrated watershed management planning in Manitoba as mandated by *The Water Protection Act*.

Key Results Achieved

- Six Water Planning Authorities were designated as follows;
  - The Seine Rat River Conservation District was designated the Seine River water planning authority.
  - The East Interlake Conservation District was designated the Icelandic River/Washòw Bay Creek water planning authority.
  - The Lake of the Prairies Conservation District was designated the Shell River water planning authority.
  - The Lake of the Prairies and the Upper Assiniboine River Conservation Districts were designated the Birdtail/Assiniboine West water planning authority
  - The Little Saskatchewan River and the Upper Assiniboine River Conservation Districts were designated the Arrow/Oak River water planning authority.
  - The Little Saskatchewan River Conservation District was designated the Little Saskatchewan River water planning authority.

- Contracted Golder Associates to undertake a methodology for source water protection assessment for public water supply systems in Manitoba.

- Red River Basin Commission – participated in the organization of the Annual Conference in Fargo, North Dakota.

- Assiniboine Delta Aquifer Management Plan – planning and administrative assistance was provided to the Assiniboine Delta Aquifer Management Advisory Board to implement the plan.

- Winkler Aquifer Management Plan – planning and administrative assistance was provided to the Winkler Aquifer Management Advisory Board to implement the plan.

Information and Knowledge Management Section

This Section establishes and manages cross-cutting departmental work teams to provide leadership, innovation, coordination and integration of the department's information and knowledge systems. Activities include coordination and facilitation services to identify information and knowledge gaps and appropriate solutions. Leadership to facilitate integrated departmental solutions is provided to ensure the accurate and timely collection and dissemination of information and knowledge of a scientific, technical, geospatial and policy nature to support the department. This Unit also provides leadership and coordinates the department's activities related to capacity building, education and information dissemination.

Key Results Achieved

- Signed a Contribution Agreement with Natural Resources Canada (NRCAN) and the Geoconnections program for $150.0 to hire a vendor to a create a geo-spatial application (Watershed MAPS) to assist Water Planning Authorities with watershed planning in collaboration with Ducks Unlimited Canada, Agriculture and Agri-Food Canada (AAFC/ PFRA) and Manitoba Water Stewardship.

- Collaborated with Natural Resources Canada in the modification and approval of a streamlined model and three-year phased approach to develop a structured database that will accurately portray the hydrography of Manitoba so more effective watershed management, planning and environmental impact assessments can occur.

- Managed the Watershed MAPS Project resulting in the development of a geospatial application to more effectively conduct watershed planning and management.

- In partnership with the Geomatics Industry Association of Canada, the Manitoba GIS Users Group, Manitoba Science Technology, Energy and Mines, and Manitoba Conservation, staff organized a provincial workshop to profile innovation in the use of geomatics in Manitoba and provide program input into the NRCAN's Geoconnections Program. This was followed by an Executive Learning Session for Deputy Ministers, senior departmental executive, and Treasury Board Staff on innovation in geomatics in Canada and Manitoba with special emphasis on the need for governance and investment in this technology.

- Responsible for the implementation of the FOCUS Initiative, an electronic work tracking system. This involved department-wide program implementation, software (PEAK) training and work group facilitation during three alignment cycles.

- Managed staff input to the departmental website in collaboration with Web Services to better inform and educate the public on water stewardship matters.

- Represented Manitoba Water Stewardship on national advisory committees [GeoConnections Program and the National Land and Water Information Service (NLWIS)] related to geo-spatial needs, programs and services and the establishment of information standards to improve public access to information, resulting in the integration of Water Stewardship's program requirements with partnering agencies and the ability to leverage outside agency resources to support departmental goals.

Legislation and Policy Section

This Section is responsible for:

- coordinating the review, amendment and development of legislation, regulations and policy required to support the sustainable management of Manitoba's water resources;
- coordinating the Estimates Book and House Briefing Book;
- coordinating the departmental planning process;
- coordinating correspondence;
- providing secretariat and policy support to the Manitoba Water Council;
- coordinating the Water Stewardship Fund; and
- coordinating departmental response for reviews for projects that may have an impact on water and related lands.

Key Results Achieved

- Water Soft Paths Project - Manitoba Water Stewardship contracted the International Institute for Sustainable Development (IISD) to conduct a 2030 Manitoba Water Visioning Sustainability study. In the first year of this three-year study, IISD crafted and delivered a draft document outlining a sustainable water vision as seen through the Water Soft Paths lens.

- BMP Top Up Incentive Program - Manitoba Water Stewardship entered into a Contribution Agreement with Agriculture and Agri-Food Canada (AAFC/PFRA) to deliver a top-up incentive program to qualified landowners to select from three BMPs that would positively influence water quality. In 2006/07, $320.0 was disbursed to landowners through this top-up program.

- Riparian Easements Delivery Program - A grant of $100.0 was provided to Manitoba Habitat Heritage Corporation (MHHC) to secure in perpetuity Conservation Easements from landowners. The entire $100.0 was spent, securing approximately 450 acres in perpetuity.

- The Section coordinated a half-day workshop on Nutrient Management in Manitoba, coinciding with the national Ag-Water Forum, organized by Agriculture and Agri-Food Canada (AAFC/PFRA). Approximately 75 participants from Manitoba and across Canada participated in the workshop that consisted of six presentations on topics related to Manitoba's actions to address the issue of nutrient enrichment of water.

- The Section represented Manitoba Water Stewardship on the Canadian Council of Ministers of Environment Water Conservation and Efficiency Task Group (WCETG). The task group successfully fulfilled its mandate and completed all assigned tasks on schedule, at which point the WCETG disbanded in March 2007.

- The Branch is responsible for providing secretariat and advisory services for the Manitoba Water Council. The Water Council was formally established in February 2007 and will provide Ministerial advice on policies, programs, plans, and legislation needed to achieve the department's vision of "the best water for all life and lasting prosperity". The Council will help build a broad-based consensus among Manitobans on sustainable solutions to water protection and water management.

- The Section worked with Legislative Counsel to finalize two regulations under *The Red River Floodway Act*. The Red River Floodway Regulation will prescribe the format and content of the legislated annual report on floodway operations and the process for distributing the report to the public. The Floodway Compensation Regulation will prescribe the administrative rules governing compensation for artificial spring flooding caused by the operation of the Floodway.

- Planning and Coordination Branch reviewed more than 500 development proposals and coordinated Manitoba Water Stewardship's input into more than 100 environmental reviews for projects that may have an impact on water and related lands.

- The Planning and Coordination Branch also managed the Water Stewardship Fund. The Water Stewardship Fund (WSF) was established under Part 3, Section 29, of *The Water Protection Act* and has been financed by a $350.0 annual allocation from the Sustainable Development Innovations Fund (SDIF). Formal publications, including an application form and a brochure were developed and finalized for the Fund. All relevant information was organized and posted to a user friendly website under the department's main site.

- Forty funding requests were received by the Water Stewardship Fund and reviewed by departmental staff. The Fund provided grants to eighteen organizations. The successful projects encompass a wide range of community groups and scientific organizations and cover all of the Priority Areas identified in the Water Stewardship Fund funding guidelines. For more information on these projects and the grant levels, please see the Sustainable Development Innovations Fund (SDIF) Annual Report 2006/07.

Table EC.2

25.2(b) Planning and Coordination

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	1,141.8	21.00	1,389.4	(247.6)	1
Other Expenditures	290.8		270.2	20.6	
Total Sub-Appropriation	1,432.6	21.00	1,659.6	(227.0)	

1. Under expenditure is due to several vacant positions.

Conservation District Secretariat Section

This Section promotes the establishment of Conservation Districts (CDs) and local watershed based Boards as a preferred system for integrated watershed management planning and land/water resource programming in Manitoba. Activities include formation of new CDs, expansion of existing CDs, facilitating integrated watershed management planning, capacity building to promote effective CD Board governance, coordination of provincial services and administration of CD budgets, provincial grant funding and provincial policy. The CD Secretariat administers the directions of *The Conservation Districts Act* with eighteen CD Boards and is Secretariat to the Conservation Districts Commission.

Key Results Achieved

- CD Commission deputy ministers participated in workshops to develop a new CD program framework outlining a vision, mission, goals, objectives, provincial priorities and new funding formula.
- Established Manitoba's 18th CD - the Swan Lake Watershed CD.
- Coordinated the expansion of Seine Rat River CD to include the Rural Municipalities of De Salaberry and Ritchot and Village of St. Pierre-Jolys.
- Developed proposals to expand the boundaries of Alonsa and Seine-Rat River CDs involving five municipal governments including the two communities under the jurisdiction and authority of Manitoba Aboriginal and Northern Affairs.
- Developed four CD formation proposals and coordinated meetings with 26 municipal authorities.
- Provided support services to 18 CD Boards and staff including all aspects of governance, budgeting, policy development, programming/operations, planning and human resources.
- Finalized the East Souris River Watershed - Integrated Watershed Management Plan (IWMP); Manitoba's first IWMP approved under *The Water Protection Act*.
- Coordinated and facilitated eight sub-watershed planning processes (surface water management, infrastructure plans, riparian habitat and aquatic assessments).
- Initiated a series of workshops on capacity building focusing on governance, water management, and roles of provincial appointees on CD Boards.
- Coordinated CD Commission meetings, updated and administered new budget policy to member CDs, and finalized CD program annual audit for the Office of the Auditor General.
- Acted in extension and advisory capacity to the Manitoba Conservation Districts Association, the Association of Manitoba Municipalities, and other partner agencies.

Conservation Districts Program

The Conservation Districts Program is a partnership between the Province and the participating municipalities to provide for the conservation, control and prudent use of resources through the establishment of Conservation Districts, under *The Conservation Districts Act* of 1972. The Conservation District Secretariat of the Planning and Coordination Branch administers the Conservation Districts Program and is Secretariat to the Conservation Districts Commission.

The mandate of the program is to promote the sustainable use and management of land, water and related resources on a watershed basis. The Province thus promotes watershed-based partnerships with municipalities to develop integrated watershed management plans, implement voluntary, incentive based programs and projects through partnerships that address risks to water resources and aquatic ecosystems, and ensure that the ecological integrity and overall health of each watershed is protected by empowering the local district boards to make decisions that will have impacts for present and future generations.

Manitoba provides grants to support the Conservation Districts Programs in areas, such as water management, soil conservation, water storage, wildlife habitat, historic resources and recreation, public education, administration and a variety of other programs that promote sustainable resource management.

In 2006/07 provincial grants totalling $4,400,000 were provided to 18 CDs, as follows:

Alonsa	$240,000.0
Cooks Creek	$275,000.0
East Interlake	$185,000.0
Inter-Mountain	$220,000.0
Kelsey	$140,000.0
Lake of the Prairies	$136,000.0
La Salle Redboine	$225,000.0
Little Saskatchewan River	$170,000.0
Mid Assiniboine River	$110,000.0
Pembina Valley	$390,000.0
Seine-Rat River	$285,000.0
Swan Lake Watershed	$50,000.0
Tiger Hills	$110,000.0
Turtle Mountain	$314,000.0
Turtle River Watershed	$400,000.0
Upper Assiniboine River	$250,000.0
West Souris	$200,000.0
Whitemud Watershed	$700,000.0
Total:	$4,400,000.0

The annual budgets and activities of the 18 Conservation Districts are directed by a seven-person committee, the Conservation Districts Commission, chaired by the Deputy Minister of Manitoba Water Stewardship. Planning and Coordination Branch staff located in Neepawa provide assistance to the Conservation Districts in developing sustainable, integrated watershed management plans and in monitoring the activities of the CD Program.

In 2006/07, The Swan Lake Watershed Conservation District was formed, four Conservation District development proposals were completed for consideration by area municipalities, Seine-Rat River CD expanded into the RM of De Salaberry, Richot and Village of St. Pierre-Jolys, and 2 CD's proposed to

expand their memberships into 5 RM's and 2 communities under the jurisdiction of Manitoba Aboriginal and Northern Affairs.

Programming and financial details may be obtained from the Annual Report for the Conservation Districts of Manitoba.

Table EC.3

25.6 Community and Watershed Assistance

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Other Expenditures	4,400.0		4,400.0	0.0	
Less Recoverable from Other Appropriations	(425.0)		(425.0)	0.0	
Total Sub-Appropriation	3,975.0		3,975.0	0.0	

Water Science and Management Branch

The Water Science and Management Branch consists of over 30 scientific and technical personnel including hydrologists, limnologists or aquatic biologists, hydrogeologists, and support staff to provide services in the following main areas:

- managing and protecting the quality and quantity of ground water and surface water including beach water quality
- monitoring, forecasting and managing stream flows and lake levels
- protecting the biological and ecosystem health of Manitoba's water systems including programs aimed at preventing the introduction of invasive species
- managing transboundary water issues that may have potential to affect the quality or quantity of waters that flow to Manitoba from upstream jurisdictions
- developing and implementing programs aimed at restoring the health of Lake Winnipeg

The Branch is organized into three sections - Groundwater Management Section, Surface Water Management Section, and the Water Quality Management Section.

Services are provided to the Manitoba public, local governments, other units within the Department, other Manitoba provincial government departments, and other provincial, federal, and international governments. The Water Science and Management Branch delivers strong scientifically-based programs to ensure Manitoba's water resources and environment are managed and protected in a sound and sustainable manner including the protection of human health and property.

The Water Science and Management Branch is represented on numerous inter-departmental, provincial, national, and international boards and committees including the following:

- Lake of the Woods Control Board
- Red River Floodway Operation Advisory Board
- Shellmouth Operation Advisory Board
- International Joint Commission's International Souris River Basin Board
- International Joint Commission's International Red River Board
- Red River Basin Commission
- Prairie Provinces Water Board's Committee on Hydrology
- Prairie Provinces Water Board's Committee on Water Quality

- Prairie Provinces Water Board's Committee on Groundwater
- Canadian Council of Ministers of the Environment's Committee on Water Quality
- Canadian Council of Ministers of the Environment's Canada-wide Strategy for the Management of Municipal Wastewater Effluent
- Canadian Council of Fisheries and Aquaculture Ministers' Task Group on Aquatic Invasive Species
- Lake Winnipeg Stewardship Board
- Lake Manitoba Stewardship Board
- Working Group on Canadian Recreational Water Quality Guidelines

Activities across the Water Science and Management Branch in 2006 - 2007 included the following:

Activity	Number
Reviewed proposals for livestock operations	24
Reviewed proposals for drainage or culvert Water Rights Licences	303
Reviewed proposed Development Plans and By-Laws	96
Reviewed proposals for pipelines	6
Reviewed proposals for sale or lease of Crown Lands	237
Reviewed proposals for highway culverts, bridges, etc.	17
Reviewed proposals and draft licences under *The Environment Act* and plans for mine closures	126
Reviewed proposals for Canada-Manitoba Infrastructure projects	37
Reviewed proposals for funding under the Sustainable Development Innovations Fund and the Water Stewardship Fund	29

- Consultations were concluded on the proposed Nutrient Management Regulation under *The Water Protection Act* to establish and implement water quality management zones for nutrients.

- Continued to provide support to Manitoba to intervene in projects that pose a threat through the potential introduction of foreign biota to Manitoba waters. These include projects such as operation of the Devils Lake outlet and diversion of Missouri River water to the Hudson Bay basin via the Northwest Area Water Supply and the Red River Valley Water Supply initiatives. The Water Science and Management Branch worked to ensure that an appropriate environmental review of the Northwest Area Water Supply Project was carried-out consistent with the February 3, 2005 Washington DC District Court ruling and that the provisions of the August 5, 2005 agreement on Devils Lake were implemented.

Table EC.4
25.2(c).1 Administration

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	212.2	3.00	214.1	(1.9)	
Other Expenditures	169.3		156.6	12.7	
Total Sub-Appropriation	381.5	3.00	370.7	10.8	

Groundwater Management Section

The Groundwater Management Section is responsible for evaluation, monitoring and protection of the province's groundwater resources. Major activities include administration of *The Ground Water and Water Well Act*, carrying out studies to map the occurrence and quality of groundwater, monitoring groundwater quality and water levels and storing this information in data bases, evaluating the sustainable development capacity of aquifers, and carrying out studies to assess the potential for water quality impacts from various anthropogenic activities.

Key Results Achieved

- The well drillers logs, water level and water quality information gathered from the observation well network as well as information gathered during site specific investigations was entered into provincial data bases. Licensed water well drillers and a number of consulting firms and private individuals were supplied with a copy of the complete water well records. Information from the provincial data bases was provided in response to several hundred written and telephone requests.
- Groundwater resource information including groundwater related maps, was developed and provided to the East Interlake, La Salle River and Seine River Watersheds as part of the development of integrated watershed management plans.
- Geophysical studies of the Medora-Waskada Channel aquifer were undertaken in cooperation with the West Souris River Conservation District and the Geological Survey of Canada.
- Completed a 3-year co-operative study with groups at the University of Manitoba. The overall study examined soil and water issues related to cattle production on pasture/forage fields fertilized with liquid hog manure.
- Technical input continued to be provided for the development and implementation of the aquifer management plans for the Assiniboine Delta aquifer, the Oak Lake aquifer and the Winkler aquifer. In addition, technical support continued to be provided to assist in the development of a number of watershed plans including those for the Seine River, La Salle, and Washow Bay/Icelandic River watersheds.
- Risk-based mapping was completed for agro-Manitoba in support of a Federal-Provincial Livestock Mass Mortalities Burial project.
- The compilation of an inventory of known wells within the city of Winnipeg was continued. This will enable the identification of wells for sealing during property development.

Activity	Number
Under the *Ground Water and Water Well Act*, firms were licenced to engage in the business of drilling wells in the province.	27
As required by the Act, companies submitted water wells logs for new or replacement wells that were constructed in 2006.	1270
In addition, reports were received on abandoned wells which had been sealed under various programs.	150
Monitoring of water levels was continued within the provincial groundwater monitoring network of dedicated wells.	530
Rainfall data was collected at rain gauge sites.	35
Temperature monitoring was continued in the Winnipeg area to evaluate impacts from open loop groundwater heating/cooling systems and a regional snow survey was carried out in the late winter of 2006 to evaluate potential aquifer recharge conditions.	25
Work continued on the South-eastern Manitoba Groundwater Resource Evaluation Initiative ➢ Initial data collection and field studies began in the summer of 2005, and continued through fiscal year of 2006/2007. Geophysical logging, single well pumping tests and groundwater sampling have been carried out on observation wells. Groundwater sampling was carried out on some of the monitoring wells installed as part of the Southeast Manitoba Groundwater Resource Evaluation project. Samples were collected to characterize groundwater quality in different aquifers and to provide age dating for comparison to groundwater modeling results.	110
➢ Single well pumping tests data were analyzed.	50
➢ New observation wells were installed into the two major bedrock aquifers.	22

Geological information was collected during the drilling. Water level recorders were installed on the wells.	
A well sealing project was completed to seal observation wells that were no longer required as part of the provincial groundwater monitoring network. Wells were sealed due to problems including high static water levels and deteriorating well conditions.	11
A program to gather additional basic information on many provincial observation wells through borehole geophysical logging, carrying out pumping tests, and water sampling was continued.	70
Groundwater samples were collected and analyzed from provincial monitoring wells to gather information on long-term groundwater quality changes. This included sampling in areas of the Carbonate, Assiniboine Delta, Winkler and Glenora aquifers. Sampling was carried out on many of the shallow observation wells which were installed as part of the Manitoba Rural Groundwater Quality Initiative.	250
Monitoring has continued where the impacts of the use of hog manure as a crop fertilizer are being assessed. Both sites are in areas underlain by shallow sand aquifers. Studies were completed at two other sites and the monitoring wells at these sites were properly abandoned.	2
Operated groundwater level monitoring stations.	550
Operated rainfall monitoring stations in the Assiniboine Delta and Oak Lake aquifers.	35
Operated soil moisture stations in the Assiniboine Delta Aquifer.	38
Responses were provided to requests for information on groundwater and water wells from the public, the consulting industry, and other government agencies.	2,000

Table EC.5

25.2(c).2 Groundwater Management

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	886.9	14.00	846.8	40.1	
Other Expenditures	436.9		540.0	(103.1)	1
Total Sub-Appropriation	1,323.8	14.00	1,386.8	(63.0)	

1. Under expenditure is due to delay in implementing the new drilling program for the Groundwater Resource Evaluation project. Aquifer sustainability expenditures were lower than budgeted because of the late start.

Surface Water Management Section

The Surface Water Management Section provides hydrological scientific services to support the sustainable use of surface water, and to assure the protection of people and to minimize damage to property from floods. This is done through various activities including the provision of lake level, stream flow forecasts, and status reports on the hydrologic condition of rivers, lakes and reservoirs. Focus is placed on operation of control works and flood protection facilities. Planning and engineering studies are undertaken to guide water use, allocation and licensing decisions, to plan and design waterways, and to provide input to multi-disciplinary resource management activities. Hydraulic and hydrologic information is provided to the public. Hydraulic and hydrologic information is provided to the public. Operations of dams are coordinated for water supply, conservation, flood control, fish and wildlife habitat, and recreation.

Key Results Achieved

- Work continued on the joint Canada - Manitoba flood protection project for the Fisher River. The main elements of the project involved completion of LiDAR (Light Detection and Ranging) surveys to accurately determine land and infrastructure elevations and the development of a MIKE-11 model to determine the causes and solutions to flooding problems along the Fisher River.
- Provided input and advice on the sustainable supply of water available for allocation under *The Water Rights Act.*
- Developed discharges for design of waterways and waterway openings and to accommodate passage of fish.
- Provided hydrological input to support the development of seven Integrated Watershed Management Plans under *The Water Protection Act.*
- Provided advice on the operation of the Red River Floodway and other flood control works, including the operation of over 100 provincially owned dams.
- Provided input to proposed development plans to minimize siting structures within flood prone areas.
- Continued to assist in the preparation of an environmental assessment on additional flood mitigation and water supply enhancement measures for the Assiniboine River through modifications to the Shellmouth Dam.
- Assisted in the development of a model for the Assiniboine River in the City of Brandon to identify the 1 in 100 year flood risk areas.

Activity	Number
Operated stream flow and lake level gauging stations	136
Operated stream flow and lake level gauging stations in partnership with the federal government under the Canada-Manitoba Agreement for Water Quantity Surveys	205
Completed hydrologic analysis of the sustainable supply of water available for allocation under *The Water Rights Act* or provided input to assessments	15
Design and fish passage discharges for Manitoba Department of Infrastructure and Transportation and other sites.	115

Table EC.6

25.2(c).3 Surface Water Management

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	726.3	12.00	793.2	(66.9)	
Other Expenditures	168.0		169.1	(1.1)	
Canada-Manitoba Agreement for Water Quantity Surveys	776.3		776.3	0.0	
Total Sub-Appropriation	1,670.6	12.00	1,738.6	(68.0)	

Water Quality Management Section

The Water Quality Management Section assists in the protection, maintenance, and rehabilitation of Manitoba's water resources and environment. The Section provides leadership on various priority initiatives including Lake Winnipeg, provides scientific and technical input to multi-disciplinary watershed studies and activities, provides input to the development of legislation and policies including setting water quality standards, objectives, and guidelines, coordinates and conducts various monitoring activities, and provides input and advice on various proposals that may impact the quality of Manitoba's aquatic environment.

Key Results Achieved

- Studies of *Escherichia coli* continued on Lake Winnipeg to identify the source of bacteria at beaches in the south basin. Studies have shown that large numbers of *Escherichia coli* are present in the wet sand of beaches. During some periods of high winds when water levels are rising in the south basin, these bacteria can be washed out of the sand and into the swimming area of the lake. Research has shown that less than 10 percent of the *Escherichia coli* at Lake Winnipeg beaches are from human sources, with the remainder being from birds and animals. Results significantly enhance the present understanding of water quality in Lake Winnipeg.
- Support was provided to the Lake Winnipeg Stewardship Board to assist with the completion of its December 2006 report titled "*Reducing Nutrient Loading to Lake Winnipeg and its Watershed Our Collective Responsibility and Commitment to Action*".
- Programs were continued to prevent zebra mussel and other nuisance aquatic species from being introduced into Manitoba including the deployment of student inspectors to border crossings.
- The Water Quality Management Section collaborated with Environment Canada, Fisheries and Oceans Canada, the Lake Winnipeg Research Consortium and others to monitor Lake Winnipeg and conduct research to improve our understanding of nutrient and algae dynamics. The Section participated in three science cruises on *The Namao* and led the collection of winter samples on Lake Winnipeg.
- Additional long-term water quality monitoring stations were established in collaboration with several Conservation Districts across Manitoba. The Water Quality Index was calculated for each new water quality monitoring station and will be used as input to watershed planning and state of the watershed reporting.
- Manitoba's Water Protection Handbook, a guide for Manitobans living and working in urban and rural areas with an interest in keeping our waters clean, was developed and distributed.
- Technical input was provided to assist in the development of a number of watershed plans including those for the Seine River, La Salle, and Washow Bay/Icelandic River watersheds.

Activity	Number
Operation of long-term surface water quality monitoring stations throughout Manitoba. Up to 100 chemical parameters are analyzed routinely at all sites including nutrients, pesticides, metals, dissolved salts and minerals, general chemistry, and at certain stations, pharmaceuticals	62
Operation of routine water quality monitoring stations on Lake Winnipeg	13
Operation of ancillary water quality monitoring stations on Lake Winnipeg	48
Operation of site specific, issue-based water quality monitoring stations throughout Manitoba	35
Operation of water quality monitoring stations on Shoal Lake (source of drinking water for City of Winnipeg)	12
Monitoring beaches for bacterial quality and algal toxins	63

Table EC.7
25.2(c).4 Water Quality Management

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	526.6	10.00	628.5	(101.9)	1
Other Expenditures	576.0		774.7	(198.7)	
Total Sub-Appropriation	1,102.6	10.00	1,403.2	(300.6)	

1. Under expenditure is due to delayed recruitment.

FISHERIES BRANCH

Fisheries Administration

Fisheries Branch ensures sustainable development of fisheries resources. Management programs are developed to provide greatest benefits to Manitobans, by maintaining or enhancing populations and habitat, monitoring harvest and habitat alterations, and allocating resources for best return. The Branch directs and reports on programs and budgets, legislation and policy, standards and guidelines, and co-ordination and monitoring. The Branch also administers the Northern Fishermen's Freight Assistance Program. Head Office and Regional Fisheries Managers report to the Fisheries Director responsible for operational decision-making and program delivery.

Objective: To direct effective branch operations through appropriate allocation of staff and budget, and by identifying management priorities and programs consistent with government policy. To develop and interpret branch policies to ensure consistency with sustainable development principles and guidelines.

Key Results Achieved:

Water Stewardship continued to work with First Nations and stakeholders to develop fisheries management approaches that accommodate constitutional obligations and stakeholder interests. Head office and regional staff continued to work with Conservation and First Nation interests in Dauphin Lake fishery towards co-management of walleye harvests.

An updated Fisheries Branch Plan, with supporting recreational and commercial fishing program plans, was prepared in a manner consistent with and linked to strategic approaches. Fishing program plans are used to guide annual work planning sessions with managers conducting programs related to resource conservation and protection, and aboriginal, recreational and commercial use. Annual work plans outline new initiatives which confirm branch program priorities that address new and continuing resource user needs.

The Branch continued to liaise and coordinate with other government branches and agencies and with non-government groups and organizations on legislative, policy and program communication matters affecting the use, allocation and sustainability of fisheries resources.

Staff participated in professional training opportunities including conference attendance and professional training delivered during the annual branch meeting.

Key Program Outputs

The Branch continued to participate in the Interjurisdictional Working Group (IWG), Aquatic Invasive Species Task Group, Aquaculture Task Group, Species at Risk Task Group, and the Aquaculture Task Group reporting to the Canadian Council of Fisheries and Aquaculture Ministers, and the Freshwater Fisheries Committee and Recreational Fishing Committee reporting to the IWG. These task groups and committees are working on priority national fisheries issues to develop policies and strategic actions to address challenges and opportunities collaboratively and facilitate administrative efficiency and effectiveness.

As a product of the recommended actions in the National Freshwater Fisheries Strategy approved by CCFAM a bilateral working group of Fisheries and Oceans and Water Stewardship officials was established to explore their mandates and relationship with a view to increased cooperation and coordination on freshwater issues, more efficient and effective program delivery, enhanced action on priorities of common concern and identification of areas of challenge and opportunity. A draft template has been prepared and populated with information from both agencies outlining program activities, legislative basis, scope of implementation, challenges and risks, and opportunities for enhanced bilateral cooperation.

Table FI.1
25.2(d).1 Administration

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	99.6	1.00	100.2	(0.6)	
Other Expenditures	152.1		161.6	(9.5)	
Total Sub-Appropriation	251.7	1.00	261.8	(10.1)	

Aquatic Eco-system Management

Description:

The Section supports conservation, evaluation, restoration, and enhancement of fish and aquatic ecosystems to achieve a net gain in healthy, productive fish stocks.

Objective: To develop, co-ordinate and evaluate an aquatic ecosystem program that supports the sustainability of aquatic ecosystems, and enhances, restores and develops fish habitat providing the potential for the habitat to sustain fish resources and the benefits that they provide Manitoba.

Key Results Achieved

- Provided technical assistance in Geographical Information Systems, aerial photography, database querying, stocking updates and computer operation issues related to a variety of projects (e.g., bait blocks, stocking, stream habitat enhancements).

- As part of landscape level planning led by the Forest Practices Committee, Branch staff continued to participate in developing Forest Management Guidelines for Riparian Areas to ensure that these vital habitat types protect fish habitat and provide ecological goods and services in a sustainable manner. The Branch was also involved with Manitoba Infrastructure and Transportation to develop and review key components of guidelines for Environmental Best Management Practices for Working In and Around Water.

- Guidance was provided to regional staff and/or industry on monitoring, protecting or mitigating adverse effects on fish habitat and aquatic ecosystems related to drainage and channelization in Hatchery Drain, the Husky Ethanol Plant and Minnedosa Water Supply project, and a water quality monitoring study at the Whiteshell hatchery.

- A total of 406 development proposals were reviewed in 2006/07.

    - 78 proposals were reviewed under *The Environment Act* which was an 86% increase over 2005/06. Proposals included, but were not limited to, water treatment plants, wastewater treatment lagoons, water supply projects, irrigation projects, fertilizer storage, sewage treatment plants, pork and beef processing facilities, and bridges.

    - Five draft licenses and 19 pre-licensing environmental screening proposals were reviewed.

    - Another 304 proposals not requiring review under *The Environment Act* but having potential implications for aquatic ecosystems were reviewed. These included, but were not limited to, Crown Lands sale/lease/permit applications, and municipal development plans/amendments/ zoning bylaws.

- The Drain Maintenance Guidelines Committee is co-chaired by Fisheries Branch and Fisheries and Oceans Canada (DFO) and is working to draft guidelines that ensure that all resource interests are recognized/accommodated in drain maintenance. An Advisory Panel of major stakeholder organizations reviews Committee work and provides advice concerning development and application of the guidelines. The draft Agricultural Drain Classification maps have been and returned from the federal government. DFO is developing an implementation and stakeholder engagement plan.

- As part of the Environmental Effects Monitoring Program (EEM), the monitoring of two pulp and paper, and 10 mining effluent proposals/programs continued. EEM is required by regulation under *The Fisheries Act (Canada)*.

- The Minister directed Fisheries Branch staff to coordinate implementation of a fish passage study at the Fairford River dam based on the Terms of Reference submitted by the Lake Winnipegosis Management Board. The study is to determine whether fish passage is impeded, and if further enhancement of the facility is required. The Fairford Fishway Working Group was formed and consists of local commercial fishers and provincial and federal government representatives.

Manitoba Introduction and Transfers Committee

  - A risk assessment was completed on a proposal to import fathead minnows from the Missouri River watershed for experimental purposes. It was approved with extra filtration requirements required for containment water.

  - Further edits and details were provided to DFO with regards to amendments of the Prohibited Species List of the Manitoba Fisheries Regulations under *The Fisheries Act*.

  - A summary report was completed with regards to the risks associated with biota transfer in containment water from live fish shipments being imported from sources outside of the Hudson Bay drainage basin.

- **Species at Risk**

  - A total of 23 Committee on the Status of Endangered Wildlife in Canada (COSEWIC) status reports on fish species were reviewed and status recommendations provided to COSEWIC.

- A departmental aquatic invasive species display was completed.

- Participation on the Aquatic Invasive Species Task Group.

  - Draft work plans were completed for:
    - Education;
    - Risk assessment;
    - Early detection & rapid response; and
    - Terms of Reference for a new National Committee.

- Participation on the Manitoba Floodway Authority - Fisheries Technical Experts Committee

  - Deliverables were provided for a fish passage design study to be implemented by consultants at the Red River Floodway control structure.

  - A draft report for Phase 1 of the fish passage design study was completed and reviewed by committee members. Comments provided will be incorporated into phase 2 of the study.

- Coordination and technical advice was provided for a fishway project that was completed on the Brokenhead River by the Brokenhead Restoration Committee.

- Summary reports outlining fishery information including the status of fish habitat health were provided for on-going integrated watershed planning initiatives on the Seine River, La Salle River, and Icelandic River watersheds.

- Issued the following permits:

Type of Permit	Number
Scientific Collection	63
Live Fish Handling	16
Export	7

Objective: To operate fish hatcheries for the distribution of fish fingerlings and fry to meet requirements for commercial and sport fish stocking and conservation in Manitoba.

- Sturgeon fingerlings stocked - 2,036

- Total walleye fry stocked – 28,151,000

    - Walleye fry marked with oxytetracycline (OTC) for commercial fishing lakes – 12,226,000.

    - Fish Culture staff marked hatchery reared walleye fry with OTC to determine the contribution of these fish to commercial fisheries. Staff conducted an experiment to test the marking efficacy of OTC in walleye fry. Fry were marked in solutions of 700 and 1400 ppm OTC and at densities of 2000 and 4000 fry/litre. The marking rate was higher at 1400 ppm OTC than 700 ppm regardless of density. Please see the table below.

Percent Marking Rate		
	Density (fry/litre)	
Concentration (ppm)	2000	4000
700	29	29
1400	86	86

Table FI.2
Distribution to Sport Fishing Waters from Fish Hatcheries

Species	Fry	Fish <18cm fingerlings	Fish ≥ 18cm yearlings	Total
Brook x Brown Hybrid	0	0	1,005	1,005
Brook x Lake Hybrid	0	3,175	0	3,175
Brook Trout	0	26,400	8,378	34,778
Brown Trout	0	40,720	14,800	55,520
Rainbow Trout	0	101,500	72,475	173,975
Total Trout	0	171,795	96,658	268,453
Walleye*	14,300,000	0	0	14,300,000

*does not include stocking to commercially fished lakes

- Sport Fishing Water Bodies stocked: 113

- Commercial Fishing Water Bodies Stocked: 5

- Provided technical assistance to Lonely Lake Walleye Hatchery.

Key Program Outputs

- An estimated 3,650 people visited the Whiteshell Hatchery Interpretive Centre.
- Participated in the Manitoba Envirothon by co-chairing the Test Writing Committee. This year the competition was held in Brandon with 29 Manitoba school teams entered.
- The Department discussed with Manitoba Hydro the role of Grand Rapids Hatchery (GRH) "in respect of the impact of current and future hydroelectric developments on fish stocks and the possible transfer of responsibility for this facility to Hydro." Fisheries Branch, Civil Legal Services and Hydro were involved in developing the Purchase and Sale, and Service agreements which detail the terms and conditions for the transfer of GRH to Hydro, and Hydro's ongoing responsibility for the proportion of salary and operating costs of producing fish to mitigate impacts of northern Hydro development. A Joint Management Committee was formed of Fisheries Branch and Hydro representatives to direct all programs and planning at the hatchery.
- The Stocking and Fisheries Inventory and Habitat Classification System (FIHCS) applications in the FISHin corporate database were updated. STEP students entered data from 68 fisheries research reports into FIHCS, and stocking data was entered and an annual stocking list was generated.

Table FI.3

25.2(d).2 Aquatic Eco-System Management

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	990.1	20.19	1,028.7	(38.6)	
Other Expenditures	188.3		187.9	0.4	
Total Sub-Appropriation	1,178.4	20.19	1,216.6	(38.2)	

Sport and Commercial Fishing Management

Description:

The Section develops, administers, and evaluates management programs and policies for sport, commercial, and domestic use, including commercial bait fishing and trout farming. It also manages the Northern Fishermen's Freight Assistance Program, distribution and reconciliation of commercial fishing licences, and fish production information.

Objective:

To develop and evaluate the recreational, commercial and domestic fisheries management programs in an integrated manner that ensures sustainability of the resource and maximizes benefits from its use.

Key Results Achieved:

- Fisheries Branch, working in conjunction with regional fisheries staff, developed recreational, commercial, and bait fisheries program plans and directives consistent with the Department's Strategic Plan. These plans will assist fisheries managers in the decision-making process by addressing conservation and allocation issues that affect the management of Manitoba's recreational and commercial fisheries while ensuring fish stocks remain healthy and viable for future generations.
- Commonly understood recreational and commercial fishing program plans will also ensure a consistent and co-ordinated approach to fisheries management across the province, better integration of

management activities of all relevant agencies and ensure decisions are made on an informed basis, and guide the development of lake or fishery-specific management plans.

- Cedar Lake fishery has been restructured with a $1.6 million quota reacquisition initiative and a new management plan following a voluntary 5 year closure. The fish stocks did rebound and the management plan includes community "Resource Management Board" being consulted on management actions and changes (as opposed to just the commercial fishers association). Production has been reasonable but strong evidence of sustained stock recovery has not yet been seen.

- The Lake Winnipegosis Management Board completed its report to the Minister of Water Stewardship with recommondations on an action plan for rehabilitation of walleye stocks, to address all users, including summer/winter commercial fishers, domestic fishers, and recreational users. The Board was thanked for its input and formally disbanded by the minister. The Department has began its preliminary review and discussions of their recommendations.

- For the major commercially fished lakes in Manitoba, the following employment and production statistics are provided in reference tables: FI.8, FI.9 and FI.10.

- The 2007 Manitoba Anglers' Guide was published in partnership with Fish Futures Inc. The guide summarizes angling regulations, highlights new and proposed regulations, and includes management and other information. Anglers and user groups continued to play an important role in developing regulations and attention is continued to be focussed on simplifying regulations without diminishing conservation.

- As part of Manitoba's delegated role of administering federal government regulations, amendments necessary for the proper management of Manitoba's fisheries resource were completed and forwarded to The Department of Fisheries and Oceans for inclusion in the Manitoba Fisheries Regulations (1987).

- Fisheries Branch continues to coordinate Winnipeg's Urban Angling Partnership (UAP). The UAP, comprised of Manitoba Wildlife Federation, Fish Futures Inc., Mid-Canada Marine Dealers Association, The Complete Angler, City Cats, City of Winnipeg and Government of Manitoba, offers residents and visitors recreational angling opportunities through structured programs. These include: Learn to Fish Clinics, Winnipeg Fish Festival, Youth Angling Camps, Fish Winnipeg Media/Corporate Challenge (monies raised for youth angling programs) and Urban Fall Fishing Derby. The program's goal is to encourage participation in recreational fishing and address declining angling licenses sales (refer to Table FI.11).

- Continued consultations on the development of the proposed marketing regulations with commercial fishermen (Manitoba Commercial Inland Fishermen's Federation conference and Board of Directors), Regional Operations (Conservation), current special dealers (both commercial fishermen and industry) and the Freshwater Fish Marketing Corporation. Manitoba is working to develop a rational and updated framework for intra-provincial marketing of fish that will enhance opportunities for the industry as a whole and clarify legitimate sources of fish and record keeping requirements.

- A Manitoba Special Dealer's License issued by the Freshwater Fish Marketing Corporation permits the licensee to purchase fish from licensed commercial fishers in the Province of Manitoba and to sell this fish within the Province of Manitoba to fish consumers or to restaurants and retail outlets for consumption in Manitoba. Forty Special Dealers Licenses were issued from May 1, 2006 to April 30, 2007 with 112,509 kilograms (248,036 pounds) of fish sold within Manitoba. The species percentage was Pickerel 88%, Goldeye 5%, Whitefish 3%, and others (white bass, perch, tullibee, sauger, catfish, mullet, pike, silver bass, pickerel cheeks) 4%.

- The bait industry (consisting of commercial bait fish fishers and leech harvesters) had estimated gross sales of $774,160. Fifty-six live bait dealer licences were issued, allowing retail sale of live bait fish and leeches. For statistics related to the bait fishing industry please refer to table FI.12.

Key Program Outputs

- The sustainable development education website was enhanced to further integrate sustainable development concepts into the new Kindergarten to Grade 12 Manitoba Science Curriculum. The site was promoted at Manitoba Education workshops, seminars and conferences (including the provincial Science Areas Group Science convention), and educational institutions throughout the province. The site provides educators and students with on-line fisheries information and grade-specific exercises to meet prescribed outcomes.

- Working in partnership with the Manitoba Wildlife Federation and Manitoba Recreation Connections, Manitoba's Recreational Fishing League completed another successful season. The league is designed to provide a community based youth angling program, re-connect youth with the environment around them, and build life coping and self-esteem skills for the future. Over 100 youth participated in the league that ran over a six week period.

- Manitoba Water Stewardship and the Manitoba Commercial Inland Fishers Federation (MCIFF) introduced the "Long Service Fisher Award" which recognizes the contributions of commercial fishers to Manitoba's social and cultural foundations and economic well-being and who have been involved in commercial fishing for 50 years or more. In conjunction with the Long Service Fisher Award, MCIFF, in partnership with Manitoba Water Stewardship, also created an Exceptional Contribution Award to recognize certain individuals from their organization who have made notable, life-long contributions to Manitoba's commercial fishing industry. Ninety-nine Long Service Fisher Award plaques and ten Exceptional Contribution Awards plaques were distributed.

- There were 29 licensed fish farmers and about 500 hobby farmers in private waters (refer to Table FI.13). Three major operators (all brokers/importers with one also producing his own fingerlings) distribute fingerlings to hobby farmers each spring. Five fee-for-fishing operations, where customers pay to fish in privately-stocked ponds or Crown waters, generally provide easy access to fishing from shore, and are ideal for small children and individuals otherwise unable to angle. Fish farmers reported selling 168,270 rainbow trout fingerlings. Grow-out operations sold 10,800 kilograms of rainbow trout and 13,180 kilograms of Arctic char.

Table FI.4

25.2(d).3 Sport and Commercial Fishing Management

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	628.2	10.00	598.0	30.2	
Other Expenditures	73.7		78.0	(4.3)	
Total Sub-Appropriation	701.9	10.00	676.0	25.9	

Regional Fisheries Resources

Description:

Regional Fisheries Managers report to Director of Fisheries and are responsible for operational decision making and program delivery according to approved government policy, standards and guidelines. Regional Fisheries Managers and Fisheries Director work together to develop annual work plans to address specific issues and informational requirements within the regions. Regional Fisheries Managers work directly with Fisheries Branch head office staff on provincial policy/program development and interpretation, and issues with provincial implications.

Objectives: To deliver Fisheries programs at a regional level and to assist in the development and management of related provincial programs; to ensure the maintenance of healthy aquatic ecosystems for the use and well being of present and future generations of Manitobans; to provide input to compliance priorities and to assure the maintenance of long – term sustainability of fisheries resources; and, to ensure an effective consultation role on behalf of the branch with all fishers.

Key Results Achieved:

Northwest Region

- Reviewed and provided recommendations to Licencing Advisory Committee (LAC) on applications for outcamps, boat/motor & fuel caches and other resource related tourism facilities. In conjunction with MB Conservation, reviewed applications for commercial fish camps, recreational cabins and other facilities. Reviewed and provided comments for environmental proposals, in particular, proposals for the rehabilitation of the Sherridon orphaned mine site, new experimental short-term mines near Snow Lake, and Tolko forest harvesting plans and operations.

- Commercial fishing licenses, bait fishing licenses & fish farming licenses were issued in conjunction with MB Conservation Region and District offices.

- Co-chaired the Cedar Lake Resource Management Board and provided input to the Cormorant Resource Management Board.

- Cedar Lake index netting was completed. (refer to Table F1.14). This is an annual requirement of the Cedar Lake Fishery Management Plan. Analysis indicated good recruitment of young walleye (2, 3 & 4 year olds) into the population. A commercial sample of 250 walleye was also obtained.

- Goose Lake index netting was completed. (refer to Table F1.14). Only 2 walleye and no large pike were captured out of a sample of 100. Pending further information on the level of recreational and tourist use, the fisherman's request of removing pike from his quota should be examined.

- A commercial sample of 250 walleye was obtained from Moose Lake (Pickerel Channel). This fishery is currently considered unsustainable for walleye. Restructuring of this fishery should be investigated in future years.

- Co-chaired the Saskatchewan River Sturgeon Co-management Board. Under the authority of this Board the Province conducts a sturgeon tagging project on the Saskatchewan River. This was done with 53 sturgeon tagged and 5 recaptured from previous years.

- Planned and co-ordinated trout stocking in the Region.

Eastern Region

- Completed reviews of all regional environmental licensing proposals, land use applications, development proposals and scientific collection permit applications. Fisheries Branch input into these reviews is critical to ensuring the long term sustainability of fisheries and fish habitat in the region.

- Completed the annual Winnipeg River sturgeon monitoring program. This program has been in place since the early 1990's and information gathered through this program will be critical in the long term management of lake sturgeon, currently under review by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) for listing as endangered under *The Species at Risk Act*.

- Participated in the development of the Wiinibiig Ziibi Numao Board. This board is focused on the Winnipeg River sturgeon stocks and is comprised of affected stakeholders, First Nations and government agencies with a vested interest in sturgeon within this system. The board is in the development phase and at present is formulating the Terms of Reference.

- Participated on the Technical Advisory Committee for the Seine River Integrated Watershed Planning process. A draft plan will be developed in 2007 and presented to the public for review. This is the first watershed plan for the region under the departments' watershed planning initiative.

- Participated in the Brokenhead River Restoration Committee and completed the Kenbro Dam fish-way project. The fish-way was a cost effective solution to a long standing fish migration barrier. Removal of the dam was not feasible due to the cost as well as public concern. This project was a joint effort between non-government organizations, the department and the local landowner.

- Regional angling regulation changes were implemented to provide greater protection for lake trout and walleye stocks. Lake trout stocks are limited in the region and anglers must now release all lake trout over 65 cm. Alterations to the Area A walleye slot limit now make this slot limit consistent with other walleye slot limits in the province.

- Completed all regional trout stocking and updated the three year regional stocking plan and trout requirement projections. The stocking program is a key component of the regional fisheries program and provides angling diversity for a wide variety of users, both local as well as visitors to the region.

Western

- Staff completed reviews of environmental licencing proposals, land use applications and development proposals through the region Integrated Resource Management Team and the Block Planning Committee. Staff reviewed Forestry Annual Operational Plans near waterways with the industry. Approximately 175 harvest blocks and associated crossings were mitigated in collaboration with the Department of Fisheries and Oceans (DFO).

- Completed draft management plan for Dauphin Lake with Western Regional Tribal Council (WRTC) Resources Management Office. Additional collaboration with WRTC is required to refine the current conservation measures and gain acceptance of the plan within First Nation communities.

- Regional staff acted in an advisory capacity to 12 Conservation Districts in the region. Participated on the Technical Advisory Committee for the Integrated Watershed Planning process for the Shell River, Assiniboine Birdtail, Arrow Oak River and the Little Saskatchewan River Watersheds. Draft Watershed plans will be developed for public review in 2007.

- Developed a stocking plan for the Porcupine Mountains and the north half of the Duck Mountains with Swan Valley Sport Fish Enhancement. Assisted Intermountain Sport Fish Enhancement with the operation of the Methley rearing ponds. Continued assessment of lakes for potential development as aerated stocked trout waters with Fish and Lake Improvement for the Parkland Region (FLIPPR). Assisted Pelican Lake Fish Enhancement and Oak Lake Water and Fish Enhancement Committees evaluation of the effectiveness of their new surface aeration systems in Pelican and Oak lakes.

- Completed regional stocking of 11,550,000 walleye and 219,000 salmonids in approximately 70 water bodies throughout the Western region to supplement natural recruitment and diversify angling opportunities.

Northeast

- Reviewed Wuskwatim Generating Station road construction and evaluated the suitability of licence and permit conditions. This project was subject to an extensive environmental review process and is the first of several developments in various stages of planning. The objective was to ensure that Fisheries Branch comments on future development proposals would provide useful and relevant input.

- Participated in the Hydro Turbine Fish Passage Study at Kelsey generating station. This is a multi-year Manitoba Hydro funded project researching the impact of fish passage through turbines. Kelsey GS is currently upgrading its turbines to a newer, more efficient design. Passage through the original turbines was assessed this year. The study will be repeated next year after the first of the new turbines is installed.

- Participated in the Norway House Resource Management Board (RMB) along with Regional Conservation and Aboriginal and Northern Affairs Staff. Provide input to four other RMBs in Region. The purpose is to represent Manitoba on the Boards fulfilling the obligations of specific agreements and to develop meaningful relationships with Aboriginal communities and resource users.

- Participated in the Southern Indian Lake Environmental Monitoring Committee with representatives from the First Nation, commercial fishers and Manitoba Hydro. This is an ongoing Committee that works to address environment issues on Southern Indian Lake arising from Hydro development. Annual monitoring of whitefish stocks continues and stocks appear to be in good condition with no indication of year class failures. Walleye stocks continue to remain low for a lake of this size. Evaluated a potential source of walleye spawn in a remote river for use in rehabilitation efforts. While a walleye run was present, the location was not suitable for spawn collection. Efforts to assess additional areas will continue in future years.

- Participated in the Nelson River Sturgeon Board (NRSB) and managed their field program. Field operations were limited by continuing high water levels and flows on the Nelson River. The Board completed grant applications for next year which are intended to increase both its field program and its outreach and education programs. The Board operates a continuing program to raise sturgeon fingerlings. This year approximately 2,500 sturgeon were hatched at Grand Rapids Hatchery and eventually raised to fingerling size and released into the Nelson River. As part of this program, the NRSB operates a rearing facility at Jenpeg where sturgeon is raised for the final two months of the program prior to stocking. This facility also provides communication/education opportunities close to Nelson River communities and First Nations.

Central

- Reviewed and provided comments on environmental licensing proposals, crown land sales, scientific collection permits.

- Commercial and recreational fishing licenses, commercial bait fishing licenses and fish farming licenses were issued out of the regional office in Gimli as well as various District offices throughout the region. Numerous competitive fishing event permits were issued for fishing derbies and tournaments throughout the region.

- Completed annual stock assessment, including index netting (refer to Table F1.14) and commercial sampling, on Lakes Winnipeg and Manitoba. Lakes Winnipeg and Manitoba represent two of Manitoba's largest commercial net fisheries. Stock monitoring on these two large lakes are a key component to Central Region's annual assessment activities.

- Conducted index netting and dissolved oxygen testing on Chitek Lake. Approximately 22 licenced commercial fishers harvest walleye in Chitek Lake during the winter. Historically, this lake has winter killed due to very low dissolved oxygen. Central Region fisheries in conjunction with Gypsumville District have been monitoring dissolved oxygen levels during critical winter periods.

- Participated in the regional Integrated Resource Management Team (IRMT) and Block Planning Committee (BPC).

- Co-chaired meetings of the Lake Winnipeg Commercial Fisheries Management Advisory Board (LWAB). The LWAB is comprised of a two co-chairs and commercial fisher representatives from 12 community areas around Lake Winnipeg. The purpose of the LWAB is to provide commercial fishers and government agencies with an opportunity discuss and develop policies for the Lake Winnipeg commercial net fishery.

- Attended commercial fishing meetings in communities around Lake Winnipeg. Community meetings represent a critical communication link between the Branch and stakeholders. These meetings provide an opportunity to deliver and receive information to/from communities around the lake.

- Participated on the Technical Advisory Committees for the LaSalle River and Icelandic River/Washow Bay Creek Integrated Watershed Planning process. Draft Watershed Management Plans will be developed in 2007.

- Reviewed and made recommendations on allocation requests through the Licencing Advisory Committee (LAC) process.

- Revised and implemented the annual regional stocking plan for walleye and trout. The stocking program is a key component to many of Central Region's recreational and commercial fisheries.

Table FI.5

25.2(d).4 Regional Fisheries Resources

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	824.8	15.00	800.4	24.4	
Other Expenditures	206.1		208.3	(2.2)	
Total Sub-Appropriation	1,030.9	15.00	1,008.7	22.2	

Northern Fishermen's Freight Assistance

Description:

The Northern Fishermen's Freight Assistance (NFFA) program assists marginal commercial operations by partial subsidization of transporting certain species from selected lakes to Winnipeg. Fishers pay the first 20¢/kg of freight, Manitoba pays the next 45¢/kg, and fishers pay any costs over 65¢/kg. Eligible species are whitefish, pike, lake trout, perch, goldeye, tullibee and sucker. Subsidy payments to fishers are issued weekly by Freshwater Fish Marketing Corporation (FFMC) on behalf of Manitoba. Fisheries allowed to opt out of FFMC are paid by the Branch at season end.

Key Results Achieved:

Fisheries allowed to opt out of FFMC are paid by the Branch at season end. To ensure expenditure does not exceed the $400,000 cap set in 2000, fishers receive an initial payment, usually 70% of their estimated eligibility. They receive final payment at fishing-year end. While a full 30% final payment may not be possible when production is high, a final payment higher than 30% may occur in low-production years. NFFA paid about $370,500.00 to 345 fishers for 2006 summer season. Payments to 33 fishers for winter season were about $29,500.

Table FI.6

25.2(d).5 Northern Fisherman's Freight Assistance

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	0.00		0.0	0.0	
Other Expenditures	410.0		410.0	0.0	
Total Sub-Appropriation	410.0		410.0	0.0	

Fisheries Enhancement Initiative

Description:

The Manitoba Fisheries Enhancement Initiative was established in 1993 when Manitoba sport fishing groups and commercial fishers indicated a willingness to pay more for their fishing license if a portion went to build fish stocks. Using a notional linkage to this revenue the Fisheries Enhancement Initiative has funded over 292 projects throughout Manitoba. These projects have aimed at strengthening fish populations, improving fish habitat or fisheries education.

The Fisheries Enhancement Fund was introduced in March 2007, a significant enhancement to existing programming into new categories of: fisheries research; fish stock assessment and monitoring; fisheries development, by way of capital investment and stocking; fisheries habitat rehabilitation and enhancement; and education initiatives pertaining to fisheries. The project review committee will include broader representation from a number of associations and stakeholders who have an interest in enhancing Manitoba's fisheries.

Objectives: To ensure that adequate fish stocks exist for the use and enjoyment of current and future generations of Manitobans; to promote local involvement of fisheries resource stakeholders, and; to increase public understanding of the importance and value of fish and fish habitat.

Key Results Achieved:

- Received 30 project applications of which 23 projects were funded.
- The annual Fisheries Enhancement Initiative stamp competition was held. The winning artwork "Licenced Catch" painted by Linda Barringer was unveiled at Oak Hammock Marsh in September 2006.

Table FI.7

25.2(d).6 Fisheries Enhancement Initiative

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	0.00		0.0	0.0	
Other Expenditures	385.3		350.0	35.3	
Grants	0.0		0.00	0.0	
Total Sub-Appropriation	385.3		350.0	35.3	

Table FI.8

Fishers Employed in Manitoba Commercial Fishery, 2005/06

	Northern Lakes	Lake Winnipeg	Lake Manitoba	Lake Wpgosis	Other Lakes	Overall
Summer						
Licence Holders	639	834	47	41	96	1,605
Hired Men or Helpers	157	167	32	64	8	420
TOTAL	796	1,001	79	105	104	2,025
Winter						
Licence Holders	87	169	420	159	251	1,063
Hired Men or Helpers	76	32	304	112	51	567
TOTAL	163	201	724	271	302	1630
Annual						
Licence Holders	650	897	424	162	252	2,310
Hired Men or Helpers	164	179	307	146	51	839
TOTAL	814	1,076	731	308	303	3,149

Note: Those who fish in more than one area or season, or who fish both as hired men and licence holders, are counted only once in the appropriate Total column. Where hired-man-and-licence-holder duplication occurs, the individual is counted as a licence holder. Therefore, the table does not total horizontally or vertically.

Commercial fishing statistics for 2006/07 fiscal year were not available in time to be included in this report. They will appear in the annual report for the next fiscal year.

Table FI.9

Commercial Fishing Production (Round kg), Total Value and Number of Licensed Fishers, 1996/97 to 2005/06

	Northern Lakes			Lake Winnipeg			Lake Manitoba		
Year	Weight (kg)	$ Value	Number of Fishers	Weight (kg)	$ Value	Number of Fishers	Weight (kg)	$ Value	Number of Fishers
1996/97	3,339,650	4,290,500	577	4,312,600	8,864,050	858	1,344,450	1,840,450	552
1997/98	2,621,550	3,565,750	578	3,991,600	8,340,050	791	1,518,000	2,207,800	509
1998/99	2,761,800	4,350,500	475	4,825,600	14,119,350	786	1,734,450	2,284,800	520
1999/00	3,235,650	5,087,500	527	5,419,050	16,983,500	822	1,943,950	2,416,950	506
2000/01	3,318,650	5,608,800	525	6,217,850	20,386,750	883	2,342,400	2,847,050	491
2001/02	3,188,100	5,341,850	469	6,237,950	20,380,350	895	2,115,750	3,797,100	491
2002/03	3,260,350	5,750,000	505	6,204,150	20,894,400	913	2,286,850	2,877,650	479
2003/04	3,025,250	4,883,100	598	6,543,300	17,030,250	921	1,995,650	1,992,400	466
2004/05	2,813,900	4,299,400	699	6,380,100	16,724,900	910	1,362,650	1,046,900	442
2005/06	2,231,600	3,135,350	650	6,397,500	16,736,250	897	1,074,000	1,201,500	424

	Lake Winnipegosis			Other Lakes			Manitoba Total		
Year	Weight (kg)	$ Value	Number of Fishers	Weight (kg)	$ Value	Number of Fishers	Weight (kg)	$ Value	Total Licensed Fishers
1996/97	1,635,650	682,500	172	1,190,800	1,089,350	285	11,823,150	16,766,850	2,318
1997/98	1,465,050	842,800	169	915,700	725,050	287	10,511,900	15,681,450	2,257
1998/99	2,106,550	1,892,650	172	775,000	1,273,000	191	12,203,400	23,920,300	2,079
1999/00	2,719,850	2,266,250	177	778,550	951,850	198	14,097,050	27,706,050	2,153
2000/01	2,753,550	2,004,200	175	892,250	1,131,450	237	15,524,700	31,978,250	2,228
2001/02	2,577,000	1,846,600	171	702,400	917,200	223	14,821,200	32,283,100	2,156
2002/03	2,681,150	1,416,400	176	661,250	827,800	212	15,093,750	31,766,250	2,204
2003/04	2,221,550	1,111,300	170	1,171,200	1,832,850	272	14,956,950	26,849,900	2,354
2004/05	1,079,350	842,000	161	1,113,800	1,826,650	270	12,749,800	24,739,850	2,404
2005/06	1,343,600	854,000	162	1,016,600	1,852,500	252	12,063,300	23,779,600	2,310

NOTE: Total value includes both Initial Value and Final Payment.
Commercial fishing statistics for 2006/07 fiscal year were not available in time to be included in this report. They will appear in the annual report for the next fiscal year.

Table FI.10

Commercial Fishing Production (Round Weights kg) by Area and Total Value By Species, 2005/06.

Species	Northern Lakes		Lake Winnipeg		Lake Manitoba		Lake Winnipegosis	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
Bass			6,550	1,100				
Carp	200		111,900	6,400	231,200	33,350	28,400	3,850
Goldeye	2,400	Trace[2]	6,200	650				Trace[2]
Mullet	334,400	38,950	104,000	10,550	65,550	382,550	551,150	534,150
Perch	400	Trace[2]	29,950	1,250		133,050	Trace[2]	1,350
Pickerel	525,200	27,450	4,188,750	253,000		145,850	97,150	22,550
Pike	453,400	43,100	55,700	6,950		70,950	14,150	51,550
Sauger	10,600	150	246,600	45,800		7,900	Trace[2]	Trace[2]
Trout	48,650							
Tullibee	75,850	4,050	50					Trace[2]
Whitefish	626,000	40,800	952,250	369,850		3,600	22,800	16,500
Total	2,077,100	154,500	5,701,950	695,550	296,750	777,250	713,650	629,950

	Other Lakes[1]		Total Production			Total Value $[3]		
Species	Summer	Winter	Summer	Winter	Total	Summer	Winter	Total
Bass	50		6,600	1,100	7,700	2,600	550	3,150
Carp	40,700	35,300	412,400	78,900	491,300	169,400	33,600	203,000
Goldeye	100	Trace[2]	8,700	650	9,350	18,050	1,350	19,400
Mullet	106,450	87,150	1,161,550	1,053,350	2,214,900	372,550	335,750	708,300
Perch	150	850	30,500	136,500	167,000	98,350	441,900	540,250
Pickerel	236,700	228,650	5,047,800	677,500	5,725,300	16,128,050	2,124,750	18,252,800
Pike	108,500	70,650	631,750	243,200	874,950	368,350	148,550	516,900
Sauger	550	50	257,750	53,900	311,650	765,000	161,500	926,500
Trout			48,650		48,650	36,750		36,750
Tullibee		2200	75,900	6,250	82,150	52,600	3,850	56,450
Whitefish	34,800	63,750	1,635,850	494,500	2,130,350	1,814,750	701,350	2,516,100
Total	528,000	488,600	9,317,450	2,745,850	12,063,300	19,826,450	3,953,150	23,779,600

[1] Includes Cedar, Chitek, Cross Bay, Dauphin, Inland, Little Strong, Little Limestone, Pelican, Proulx, Red Deer, Sisib-Pickerel, St. Martin, Swan, Tan, Waterhen, William

[2] Small amount.

[3] Total $ value includes both initial value and final payment.

NOTE: Commercial fishing statistics for 2006/07 fiscal year were not available in time to be included in this report. They will appear in the annual report for the next fiscal year.

Table FI.11
Angling Licence Sales and Revenue 1993/94 to 2005/06

		Resident/Manitoba – Sr. Conservation			Total: Resident of Manitoba Sr.	
Year		Number	Fee $	Revenue $	Number	Revenue $
1997/98		7,878	5.61	36,615.58	7,878	36,615.58
1998/99		8,700	5.61	40,315.00	8,700	40,315.00
1999/00		8,935	5.61	41,411.35	8,935	41,411.35
2000/01		8,532	5.61	39,537.52	8,532	39,537.52
2001/02		8,621	5.61	39,940.81	8,621	39,940.81
2002/03		8,341	5.61	38,657.01	8,341	38,657.01
2003/04		12,256	0	(9,593.98)	12,256	(9,593.98)
2004/05		12,530	0	(12,050.00)	12,530	(12,050.00)
2005/06		12,977	0	(12,491.00)	12,977	(12,491.00)

	Resident of Manitoba-Regular			Resident of Manitoba-Conservation			Total: Resident of Manitoba (includes Sr. licenses above)	
Year	Number	Fee $	Revenue $	Number	Fee $	Revenue $	Number	Revenue $
2004/05	44,885	15.89	669,173.65	73,934	10.28	686,978.52	131,349	1,344,102.17
2005/06	44,851	15.89	668,658.39	71,155	10.28	661,127.40	128.983	1,317,294.79

	Resident of Canada-Regular			Resident of Canada-Conservation			Total: Resident of Canada	
Year	Number	Fee $	Revenue $	Number	Fee $	Revenue $	Number	Revenue $
1993/94	58,833	12.50	706,624.50	73,227	7.50	512,963.00	132,060	1,219,587.50
1994/95	57,783	12.50	694,044.00	77,716	7.50	544,498.00	135,499	1,238,542.00
1995/96	55,235	12.50	663,355.00	76,844	7.50	538,289.00	132,079	1,201,644.00
1996/97	52,158	12.50	626,742.00	75,081	7.50	526,422.50	127,239	1,153,164.50
1997/98	51,859	14.02	676,760.18	73,603	8.41	546,849.23	125,462	1,223,609.41
1998/99	57,381	14.02	748,238.62	84,000	8.41	623,386.00	141,381	1,371,624.62
1999/00	57,567	14.02	750,690.37	84,938	8.41	630,356.58	142,505	1,381,046.92
2000/01	56,092	14.02	731,276.84	85,256	8.41	632,700.96	141,348	1,363,977.80
2001/02	56,951	14.02	742,473.02	86,223	8.41	639,893.43	143,174	1,382,366.45
2002/03	54,801	14.02	714,456.02	81,629	8.41	605,678.89	136,430	1,320,134.91
2003/04	53,995	14.02	703,974.90	82,576	8.41	612,873.16	136,571	1,316,848.06

Continued...

	Resident of Canada, Non Resident of Manitoba- Regular			Resident of Canada, Non Resident of Manitoba- Conservation			Total: Resident of Canada, Non Resident of Manitoba	
Year	Number	Fee $	Revenue $	Number	Fee $	Revenue $	Number	Revenue $
2004/05	1,906	37.38	69,383.28	8,939	18.69	158,350.91	10,845	227,734.19
2005/06	1,705	37.38	62,055.90	8,495	18.69	150,422.55	10,200	212,478.45

	Non-Resident of Canada – Regular			Non-Resident of Canada- Conservation			Total: Non-Resident of Canada	
Year	Number	Fee $	Revenue $	Number	Fee $	Revenue $	Number	Revenue $
1993/94	8,770	32.50	280,744.00	20,742	17.50	352,905.50	29,512	633,649.50
1994/95	8,299	32.50	265,668.50	21,906	17.50	372,702.50	30,205	638,371.00
1995/96	7,821	32.50	250,369.50	22,448	17.50	381,856.00	30,269	632,225.50
1996/97	6,840	32.50	218,945.50	21,757	17.50	370,199.50	28,597	589,145.00
1997/98	6,712	37.38	244,557.56	23,406	20.56	458,473.36	30,118	703,030.92
1998/99	7,149	37.38	260,237.62	26,223	20.56	513,312.88	33,372	773,550.50
1999/00	7,192	37.38	261,840.96	27,151	20.56	531,532.56	34,343	793,373.52
2000/01	6,130	37.38	223,166.40	29,959	20.56	586,452.04	36,089	809,618.44
2001/02	6,120	37.38	222,788.60	27,716	20.56	542,490.96	33,836	765,269.56
2002/03	6,075	37.38	221,122.50	26,121	20.56	511,251.76	32,196	732,374.26
2003/04	5,974	37.38	217,466.12	24,952	20.56	488,348.12	30,926	705,814.24
2004/05	4,755	51.40	239,777.00	24,089	28.04	651,714.56	28,844	891,491.56
2005/06	4,271	51.40	215,364.40	23,116	28.04	625,376.64	27,387	840,741.04

	Total Regular Licenses		Total Conservation Licenses		Total Licenses	
Year	Number	Revenue $	Number	Revenue $	Number	Revenue $
1993/94	67,603	987,368.50	93,969	865,868.50	161,572	1,853,237.00
1994/95	66,082	959,712.50	99,622	917,200.50	165,704	1,876,913.00
1995/96	63,056	913,724.50	99,292	920,145.00	162,348	1,833,869.50
1996/97	58,998	845,687.50	96,838	896,622.00	155,836	1,742,309.50
1997/98	58,571	921,317.74	104,887	1,041,938.17	163,458	1,963,255.91
1998/99	64,530	1,008,476.24	118,923	1,177,013.88	183,453	2,185,490.12
1999/00	64,759	1,012,531.20	121,024	1,203,300.49	185,783	2,215,831.79
2000/01	62,222	954,443.24	123,747	1,258,090.52	185,969	2,213,133.76
2001/02	63,071	965,251.62	122,560	1,222,325.20	185,631	2,187,576.82
2002/03	60,876	935,578.52	116,091	1,155,587.66	176,967	2,091,166.18
2003/04	59,969	921,441.02	119,784	1,091,627.30	179,753	2,013,068.32
2004/05	51,546	978,333.93	119,492	1,484,993.99	171,038	2,463,327.92
2005/06	50,827	946,078.29	115,743	1,424,435.59	166,570	2,370,513.88

Note: Revenue figures are net (less vendor's commission).
Resident of Manitoba Senior's Conservation Licenses were introduced in 1997-1998.
Starting with the 1999/00 season – angling licenses will be valid from May 1 – April 30. Licence sale statistics for the 2006/07 Annual Report will be based on the most recent complete season i.e. the 2005/06 season.
Resident of Canada, Non Resident of Manitoba Regular and Conservation Licenses were introduced in 2004/05.

Table FI.12
Bait Fishing Industry Statistics

	Year				
	2002/03	2003/04	2004/05	2005/06	2006/07
No. of licensed bait fish Fishermen (frozen & live)	78	76	70	63	63
No. licensed for collection of live bait fish	41	39	35	33	35
No. of leech harvesters	29	32	24	21	24
No. of live bait dealers	60	62	57	50	56
No. of Kgs of Frozen Bait Fish Produced	86,000	97,800	82,100	85,750	65,280
No. of live bait fish Produced (dozen)	106,730	129,300	105,710	133,660	129,380
No. of Kgs of Leeches Produced	1,700	1,830	1,900	1,720	1,680
Estimated Gross sales					
Live bait fish	$136,500	$170,180	$147,650	$199,200	$222,230
Frozen bait fish	$521,800	$643,110	$558,150	$542,430	$473,340
Leeches	$77,540	$83,950	$85,290	$78,780	$78,590
Total	$735,840	$897,240	$791,090	$820,410	$774,160

Table FI.13
Manitoba Fish Farming Statistics

		Year				
		2002/03	2003/04	2004/05	2005/06	2006/07
No. of Licensed Operators		32	25	28	28	29
	Species					
No. of Eggs Imported	Rainbow Trout	20,000	0	20,000	15,500	115,00
	Arctic Char	0	0	0	0	0
	Brook Trout	0	0	0	0	0
	Other	0	0	0	0	0
No. of Fingerlings Imported	Rainbow Trout	20,000	0	20,000	15,500	120,000
	Arctic Char	0	0	0	0	0
	Brook Trout	0	0	0	0	0
	Other	0	0	0	0	0
No. of Eggs/Fry Purchased in Manitoba	Rainbow Trout	0	0	0	0	0
	Arctic Char	0	200,000	0	200,000	214,000
	Brook Trout	0	0	0	0	0
	Other	0	0	0	0	0
No. of Fingerlings Purchased in Manitoba	Rainbow Trout	41,450	32,250	4,000	8,100	9,300
	Arctic Char	45,000	0	90,000	0	0
	Brook Trout	0	0	0	0	0
	Other	0	0	0	0	0
No. of Fingerlings Sold	Rainbow Trout	190,000	184,500	191,000	162,200	168,270
	Arctic Char	0	9,800	100,000	0	0
	Brook Trout	0	0	0	0	0
	Other	0	0	0	0	0
No. of Kgs of Fish Sold	Rainbow Trout	16,050	9,812	10,227	10,520	10,800
	Arctic Char	47,000	24,691	40,409	7,159	13,180
	Brook Trout	245	76	294	0	0
	Other	4,800	10,909	5,700	0	0
No. of Fingerling Customers		746	602	579	483	496

Table FI.14
Fisheries Monitoring 2006/07

Background:

Fisheries Branch of the Department of Water Stewardship undertakes an annual fish stock monitoring program to evaluate the status of fish stocks and make management changes necessary for the sustainability of the resource. Below is the list of lakes index netted in 2006/07.

Western Region
Dauphin Lake
Pelican Lake (south)
Rock Lake
Lake of the Prairies
Whitefish Lake
Lake Winnipegosis
Wellman Lake
Singush Lake

Northwestern Region
Cedar Lake
Moose Lake
Goose Lake
Saskatchewan River (sturgeon)

Eastern Region
Winnipeg River (sturgeon)
Lac du Bonnet

Central Region
Lake Winnipeg
Lake Manitoba

Northeastern Region
Playgreen Lake / Lake Winnipeg north basin
Southern Indian Lake
Paint Lake
Setting Lake

It should be noted that while some major fisheries are monitored each year, others are monitored on a rotating or as required basis.

Office of Drinking Water

Objective:

The Office of Drinking Water was established to coordinate the activities of the province's drinking water program under *The Drinking Water Safety Act*, with the objective of:

a) To administer and enforce *The Drinking Water Safety Act* and the regulations, licences, permits, advisories and orders made under it to assure public drinking water supplies are safe, adequate, aesthetically pleasing and acceptable for present and future residents of, and visitors to, the Province of Manitoba;
b) To provide a program that employs flexibility and prevention as an effective approach to public health protection;
c) To provide guidance, technical expertise and up-to-date information and educational materials about drinking water safety to water suppliers and the public;
d) To promote involvement of public, government agencies and departments, communities and private organizations in the decision-making process, and to share expertise and to facilitate co-operative efforts in drinking water programs and policies for ensuring safe drinking water; and
e) To provide adequate, clear, concise, and publicly visible documentation of results.

Key Results Achieved

The review and approval of the design plans and specifications for the construction of public and semi-public water supply and distribution systems and wastewater collection and pumping systems to ensure compliance with guidelines and standards.

The issuing of permits and licenses for the construction and operation of public water supply and wastewater collection projects and identified semi-public water supplies.

The undertaking of routine and unscheduled on-site inspections of water sources, facilities and equipment and, the assessment of new construction and ongoing operation and maintenance of water systems to verify their adequacy and reliability for producing and distributing safe water.

The monitoring of the operation of the water treatment system and distribution works as well as the wastewater collection and pumping system.

The monitoring of water quality (raw and treated), the evaluation and reporting of results from laboratory water quality analyses.

The development of guidelines for the design, construction and operation of water supply and wastewater collection and pumping systems pursuant to *The Drinking Water Safety Act* and its Regulations.

The development of policies and procedures for enforcement of water supply system, wastewater collection and pumping system Regulations.

The development of protocols for the sampling and monitoring of water supplies.

The assessment of new, innovative and alternative treatment technologies for water systems or works pursuant to the requirements of *The Drinking Water Safety Act*.

Participation in the co-ordination of operator training and certification programs as required to ensure compliance with the requirements of the Regulations.

Participation in the development of watershed management and wellhead protection initiatives for the protection source water quality.

The provision of technical support to the office of the Chief Medical Officer of Health and Regional Medical Officers of Health.

The provision of training for Environment Officers and Public Health Inspectors on standards and regulatory requirements to ensure they have current knowledge and skills to successfully and safely perform their duties.

The provision of information relating to drinking water quality inspections, incident data collection and dissemination and analysis for field staff, managers and department executive through the use of data management tools.

The provision of Departmental representation on various national committees and organizations to achieve efficiencies and pro-active response to emerging issues.

The provision of technical support for emergency response services to environmental accidents involving drinking water.

The preparation and delivery of information sessions, electronic and written material on new or changing division programs.

Expected Results 2006/07	Key Results Achieved 2006/07	Comments and Recent Actions
Public water systems that are in compliance with all Provincial and Federal Regulations and requirements.	All systems are being monitored on an on-going basis to ensure safety of water supplies. 90% of all water systems currently comply with the required testing schedule. These systems provide the water to 90% of Manitoba's population. (72% compliance in 2003; 83% compliance in 2005.)	74% of Manitobans live in communities of 3000 or more that are served by piped water systems. These systems are >95% compliant with bacteriological and disinfectant testing schedules. 21% of Manitobans are served by water systems that are between 85 and 95% compliant with testing schedules. An estimated 5% of Manitobans rely on water systems that are less than 85% compliant with testing schedules. With the Drinking Water Quality Standards Regulation coming into effect on March 1, 2007 Greater responsibility is being placed on owners and operators of water systems to monitor water quality, and recognize, report and respond to water quality incidents. Non compliance includes sample losses, sample breakage, laboratory error, excessive transit times and non-sampling.
Knowledgeable regional field personnel who are trained and certified in effective and professional delivery of the department's drinking water programs.	Four Drinking Water Officers were hired in February 2007 to fill four of five vacancies, and are currently being trained in the efficient and effective delivery of the program.	

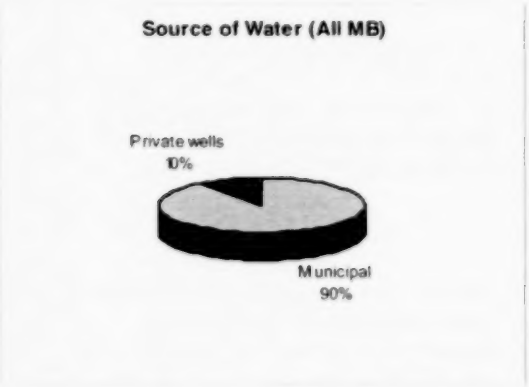
Expected Results 2006/07	Key Results Achieved 2006/07	Comments and Recent Actions
Educational materials for owners of public, semi-public and private water systems. Competent operators of water treatment and distribution systems. Disseminated guidelines, protocols, information bulletins and public Fact Sheets for the effective administration of the drinking water program.	Operational Guidelines for Monitoring and Reporting for Public and Semi-Public Water Systems are under development and will be available in July/August 2007. Office of Drinking Water personnel are working co-operatively with Conservation personnel on the classification of water utilities and certification of operators. Fact sheets, policy documents and guidance documents are under development relating to the recently enacted regulations under *The Drinking Water Safety Act*.	
Assurance that operating utilities are assessed for new issues or parameters of concern on a regular basis.	Utilities have two years from the enactment of the new Regulations to apply for operating Licences under *The Drinking Water Safety Act*. Requirements for monitoring and testing for new issues or parameters of concern will form part of licences issued for the facilities. Under the Safe Drinking Water Initiative, new resources have been identified to enhance surveillance and reporting.	Utilities have been prioritized in a risk-based approach and utilities at highest risk are being asked to apply immediately for their initial operating licences. The balances are sequentially being asked to apply over the remainder of the two year window. The Office of Drinking Water will continue to test water quality at utilities. Surveillance will focus on parameters with complex sampling protocols and emerging parameters of interest.
A province-wide water quality database for all public and semi-public drinking water systems which is electronically accessible to the general public.	The database application is now operational. Work is now proceeding on the business rules, data migration, staffing and training.	Data is available to the Public on request. Web access for the public will likely occur in the 2008/09 fiscal year.

Other Related Activities	2006/07 Annual Report Key Results Achieved	Comments/recent actions/links
Development of Regulations under the Drinking Water Safety Act	Two regulations under the Drinking Water Safety Act were enacted on March 1, 2007. These are the "Drinking Water Quality Standards Regulation" and the "Drinking Water Safety Regulation"	These regulations have for the first time in Manitoba, established drinking water quality standards for utilities to meet into a Regulation and set into licence, the minimum requirements for the operation of water utilities. http://www.gov.mb.ca/waterstewardship/odw/reg-info/acts-regs/index.html
Repeal portions of regulations under the Public Health Act.	Portions of Regulations 330/88R and 331/88R under the Public Health Act that are now addressed under the Drinking Water Safety Act have been concurrently repealed.	As new regulations under the Drinking Water Safety Act, the Ground Water and Water Well Act and the Water Protection Act are developed, the remaining portions of these two regulations will be repealed.

Sources of Water (All Manitoba):
90% of Manitobans are served by municipal systems.
10% of population rely on private wells.

Compliance by system:
90% is the average compliance with bacteriological testing and disinfectant monitoring schedules for all systems (not factoring population size).

Compliance by population:
74% of Manitobans rely on municipal systems serving over 3000 customers. All of these utilities have achieved a 95% compliance with bacteriological testing and disinfectant monitoring schedules.



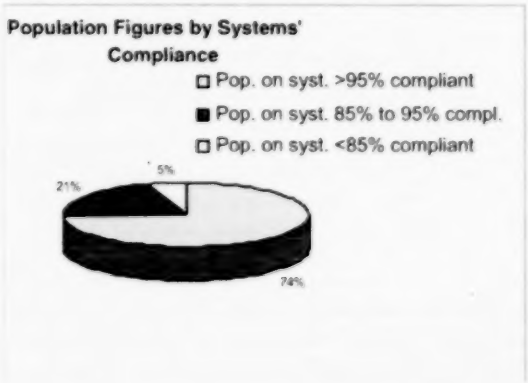


Table DW.1

25.2(e) Office of Drinking Water

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	931.4	18.00	1,054.7	(123.3)	1
Other Expenditures	554.8		1,079.1	(524.3)	2
Total Sub-Appropriation	1,486.2	18.00	2,133.8	(647.6)	

1. Under expenditure is due to several vacancies within the section offset by severance and vacation payments due to retirements.
2. Under expenditure is due to vacancies and related program delays.

INFRASTRUCTURE AND OPERATIONS

Administration

Staff provides the necessary direction and program coordination for the Infrastructure and Operations Division of Manitoba Water Stewardship so that the optimum development, allocation and conservation of the water resources of the province are ensured. Staff provide administrative and policy direction, controls and monitor funding, monitors efficiency and effectiveness of divisional programs achieving goals consistent with provincial and departmental policies. Programs are administered within budgeted funding and schedules.

Table IO.1
25.3(a) Administration

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	436.2	6.00	433.9	2.3	
Other Expenditures	582.5		634.5	(52.0)	
Total Sub-Appropriation	1,018.7	6.00	1,068.4	(49.7)	

Water Licensing

Water Licensing consists of two distinct program areas: the licensing of water abstraction projects as required under the provisions of *The Water Rights Act* and the licensing of water power (hydroelectric) projects under *The Water Power Act*. The common theme of both programs is the allocation of a valuable provincial Crown resource for a beneficial purpose while ensuring the protection of the interests of all Manitobans and potentially affected third parties. A total of 18 FTE positions make up the Section with 14 working on water rights licensing issues and 3 assigned to water power licensing issues with the Section manager accounting for the remaining position. The academic backgrounds of the staff include engineers, hydrogeologists, environmental scientists, a soil scientist, technologists and a database management specialist.

Water Rights Licensing program

Working under the authority of *The Water Rights Act*, the staff of the Water Rights Licensing program process applications requesting the allocation of surface water or groundwater for municipal, agricultural (i.e. livestock), industrial, irrigation and other purposes. All new projects require the issuance of either a Development Authorization for surface water projects or a Groundwater Exploration Permit for groundwater sourced projects in advance of such projects proceeding to construction. Water rights licenses are issued to the applicants subsequent to the satisfactory completion of a project. The Executive Director of the Regulatory and Operational Services Division approves the Development Authorizations and Licenses. In addition to these instruments, water rights licensing staff also respond to requests to divert water for short term purposes. In such cases (e.g. hydrostatic testing) a letter of authorization is issued rather than a formal licence.

Three staff persons are located in Carberry at the Canada-Manitoba Crop Development Centre (MCDC). Two of these people are directly involved in licensing irrigation projects. The third person is an irrigation specialist who conducts programs into the safe and efficient application of irrigation water to crops thus ensuring the sustainability of Manitoba's irrigation sector.

Water Power Regulation and Crown Land Development Review

The staff of the Water Power licensing program is responsible for two important sub-program areas the most high profile of which is the licensing (or re-licensing) of new and existing hydroelectric power stations. Currently there are 18 water power projects that have been licensed. Some of these projects were first licensed over 50 years ago. Licensing continues to react to evolving societal expectations regarding issues of stewardship of the resource and equity issues for both locally impacted residents and Manitobans as a whole.

The other sub-program is concerned with the disposition of applications to develop Crown land parcels located within the Water Power Licence Areas and/or Water Power Reserve Areas. Although these projects have a short time frame compared to the licensing of water power stations they are of great importance to the applicant.

Table IO.2

25.3(b) Water Licensing

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	1,013.6	18.00	1,037.9	(24.3)	
Other Expenditures	96.6		88.7	7.9	
Total Sub-Appropriation	1,110.2	18.00	1,126.6	(16.4)	

Water Control Infrastructure

In September 2006, infrastructure-delivery functions of Water Stewardship were transferred to the Department of Infrastructure and Transportation (MIT). This re-organization will provide integrated infrastructure project delivery in MIT with respect to engineering services, tender process and project management. Water Stewardship will continue to support the policy and planning processes that address the environmental, social and economic value of water and protection of health and property from water-related hazards. This will include input into infrastructure-delivery services of MIT to address overall priorities such as flood protection, effective drainage and water control structure management.

Prior to the re-organization, the Water Control Infrastructure Section was solelyy responsible for the oversight, development, direction and administration of programs related to Provincial water control infrastructure, including flood protection works, agricultural drains and dams.

2006/07 Key Results

- The maintenance and capital works programs for maintaining, refurbishing and reconstruction of a number of water control works were developed, and direction was provided with respect to their implementation and with respect to matters of budget. The works include waterways, water crossings, water control structures, dams and dikes. Engineering design and technical support was provided for a number of infrastructure projects.

- Development proposals that could affect the infrastructure were investigated and authorization permits outlining terms for continued safe and effective use were issued.

- In 2006/07 eight licensing applications were received for construction of small dams under *The Water Rights Act*. Six licences were issued and ten licences (including dams whose applications were submitted in 2005-2006) are still being assessed or are on hold pending receipt of additional information from the applicant.

- A database of provincially-owned infrastructure including maps, plans, field/survey information, and microfiches is maintained. Requests for loans of copies or for reproduction copies were filled and specialized equipment and supplies were maintained.

Table IO.3
25.3(c) Water Control Infrastructure

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	607.2	9.00	578.6	28.6	
Other Expenditures	90.0		63.2	26.8	1
Total Sub-Appropriation	697.2	9.00	641.8	55.4	

1. Over expenditure is due to the incremental costs of supporting a full complement of staff, including use of additional government vehicles; fleet and insurances; office expenses and traveling costs supporting a full complement of staff.

Regional Water Operations

In late December, 2006 reorganization of the Regional Operations Division of Water Stewardship (MWS) Infrastructure and Operations took place. This resulted in transfer of responsibility for Provincial Waterways – drains and dams to Manitoba Infrastructure and Transportation (MIT). This included the transfer of approximately 90 surveyor, engineer and superintendent FTE's from MWS to MIT.

The Department has now established a dedicated Water Control Works and Drainage Licensing Branch with 25 staff including 14 new Water Resource Officers who will be located at various locations in rural Manitoba. Six of these new positions were established in 2006/07.

Treasury Board approved an increase in annual budget for this section that will lead to hiring of 6 new staff for the section. Further Treasury Board submissions will be prepared, requesting authorization to fill an additional 8 field and supervisor staff positions.

In June, 2006 the Water Rights Amendment Act was proclaimed, which implemented changes to The Water Rights Act to improve enforceability. This act also gave the Minister of Manitoba Water Stewardship the ability to designate officers under the act. Regulation changes under the Summary Convictions Act have been requested in order to establish set fines for common offenses under The Water Rights Act. Several existing staff have successfully completed an enforcement training course designed in consult with Manitoba Justice and these individuals have been designated officers by the minister.

A policy review and revision was also conducted in the first quarter of 2007 and approval of revised policies governing licensing and enforcement is underway.

Legislative changes, staffing increases, staff training and policy review are intended to lead to improvements in response times for license applications and closer monitoring of existing licenses to ensure compliance with license conditions. These changes should also improve the efficiency and effectiveness of enforcement of the act and provide increased support to Conservation Districts interested in participating in the process of licensing water control works.

The following table outlines license applications received, licenses issued and complaints received, by region in 2006/07. Since creation of the provincial section, improvements have been made with respect to tracking of data so that future reports will be more accurate.

Region	Applications Rec'd	Licenses Issued	Complaints Received
Western	162	107	88
Red River	128	96	7
Interlake	98	6	4
Totals	388	209	99

Table IO.4

25.3(d) Regional Water Operations

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	399.1	42.99	614.5	(215.4)	1
Other Expenditures	270.0		270.0		
Total Sub-Appropriation	669.1	42.99	884.5	(215.4)	

1. Under expenditure is due to several vacancies within the section as well as one under-filled position.

Waterway Maintenance

Regional engineering and division staff performed waterway maintenance activities for three categories of water control infrastructure works, namely: water allocation, flood-damage reduction and waterway drainage. These infrastructure works include nearly 100 water supply and flood control dams, approximately 30 flood control works like the Red River Floodway and Portage Diversion, over 4,400 km of waterway channels, over 1,000 bridges and large culvert crossings over these waterways, and an additional 1,000 smaller-sized culvert crossings over these waterways. The responsibility for the maintenance and reconstruction of the water control infrastructure works was transferred to Manitoba Infrastructure and Transportation in September, 2006. The maintenance activities carried out in 2006/07 are described in that department's Annual Report.

Table IO.5

25.3(e) Waterway Maintenance

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	0.0		0.0	0.0	
Other Expenditures	991.9		1,200.0	(208.1)	1
Total Sub-Appropriation	991.9		1,200.0	(208.1)	

1. Under expenditure is due to timing of tendering and awarding the contracts for the Sturgeon Creek Study and Shoal Lake Study review, as well as timing of invoicing for Wuskawatim-Phase 4.

Water Stewardship Initiatives

Project	Amount (000s)	Description
Regulation development & related consultations	$16.6	Water Stewardship continued the development of a regulation defining Water Quality Management Zone for Nutrients in 2006/07. In addition, the development of the regulation establishing Water Quality Standards, Objectives, and Guidelines was initiated in fiscal year 2006/07 and extended to fiscal year 2007/2008. In the future, additional regulations will be developed under the Water Protection Act including those required to protect riparian areas, to protect against invasive species, plus others.
Water Council	$13.5	This project involved the establishment and support of the Water Council in fiscal year 2006/07. The Water Protection Act establishes the Manitoba Water Council. The Water Council has, subject to the direction of the minister, the following responsibilities: (a) to monitor the development and implementation of watershed management plans in the province; (b) to review regulations respecting water quality management zones, and provide advice to the minister; (c) to advise the minister about matters relating to water generally; (d) to coordinate the activities of advisory boards and similar entities that performs functions relating to water, including advisory boards and other entities specified by regulation; (e) to assist in reporting sustainability indicators relating to water.
Watershed planning	$175.0	Water Stewardship partnered with Conservation Districts to initiate seven Watershed Plans in fiscal year 2006/07. Water Stewardship and the individual Conservation Districts signed Memorandums of Understanding (MOU) outlining agreement on the process and time frame to develop a Watershed plan and agreement on the role and responsibilities of the Conservation District as it applies to the development and implementation of a Watershed Plan. Once the MOU was signed and the detailed Terms of Reference for the Watershed Plan agreed upon, Conservation Districts were provided with a $25.0 grant to offset the costs associated with the development of the plan. This fund also covered additional operating costs to provide Water Stewardship support for the development of the five Watershed Plans.
Water conservation	$17.4	The allocation was used to develop a water conservation strategy for Manitoba. The strategy was developed in partnership with Green Manitoba. Implementation of the strategy will involve a large communication initiative in future years.
Water Stewardship Fund development & implementation	$4.2	This allocation was developed to advertise and promote the Water Stewardship Fund – Broad Allocation under the Sustainable Development Fund. This included preparing, printing and distributing information brochures and Water Stewardship Fund applications. This will be on-going process in future years. The mandate of the Fund is to support the following priorities: • Watershed planning and implementation • Water-related scientific research • Education and capacity building

Project	Amount (000s)	Description
		• Water conservation • Water quality protection and improvement, and • Economic development.
National Hydro Network GIS	$50.0	This project provided Manitoba with one of the basic tools necessary to; 1) protect the public water supplies, 2) respond to emergency situations, 3) facilitate and support integrated watershed planning and management, and 4) secure aquatic ecosystems, riparian and wetland areas. This represented year 2 of a three year Federal: Provincial 50:50 cost shared project. This project provides the basic "framework" for geospatial data that is necessary for Water Stewardship to perform its functions and achieve its goals.
Clean Water Education Campaign	$8.6	The Clean Water Education Campaign built on last year's Clean Water Campaign to increase Manitobans awareness of the value of water in our lives and what we all can do to become better stewards of our water. The focus of this Education Campaign was to utilize general public service messages, expand water as part of the school curriculum and develop new water stewardship promotional material. The water stewardship content of the school curriculum has been expanded this past year with material about water that has a southern Manitoba focus. This basic model, developed by Rivers West, can be expanded to address water related issues of northern and First Nation communities. This reinforces the concept that all Manitoban's need to be involved and introduce the First Nations perspective toward water.
APF BMP top up	$400.0	The Beneficial Management Practices (BMP) Top-Up Incentive Program was designed to provide an incentive for Manitoba producers to consider a select number of BMPs that promote water protection practices under the APF. This Beneficial Management Practices (BMP) Top-Up Incentive Program, delivered in partnership with the Canada-Manitoba Farm Stewardship Program (CMFSP), was administered by Prairie Farm and Rehabilitation Administration (AAFC-PFRA). This program targets water quality issues by promoting the adoption of beneficial management practices on the landscape.
Riparian easements	$250.0	This program purchased riparian easements under The Conservation Easement Act and was administered by the Manitoba Habitat Heritage Corporation on behalf of Manitoba Water Stewardship.
Watershed planning support grant to MHHC	$150.0	A grant of $150.0 was given to the Manitoba Habitat Heritage Corp. (MHHC), to provide services to support Water Planning Authorities in the development of Integrated Watershed Management Plans.
Support to Rivers West - Red River Greenway initiative	$75.0	Water Stewardship provided grant funding to Rivers West to contract the services it requires in support of the Red River Greenway Partnership Initiative.
Lake Winnipeg Stewardship Board	$107.4	The Lake Winnipeg Stewardship Board was formed on July 18, 2003 to assist the Manitoba Government implement its Lake Winnipeg Action Plan. The Lake Winnipeg Stewardship Board is comprised of 18 members including community leaders, representatives of key stakeholders (e.g., Keystone Agricultural Producers, Association of Manitoba Municipalities,

Project	Amount (000s)	Description
		Lake Winnipeg Research Consortium). In order to better meet its mandate, the Board formed five committees. The Board meets monthly while the individual committees meet as required, but usually at least monthly.
Support to the Namao	$100.0	The former Canadian Coast Guard vessel Namao is now owned and operated by the Lake Winnipeg Research Consortium. The Consortium is incorporated and is comprised of about 30 agencies and organizations with an interest in Lake Winnipeg. It is expected that the Consortium will operate the Namao on Lake Winnipeg in fiscal year 2006/2007 for three sampling cruises. Total estimated annual costs are around $600.0. Much of the financial support was provided jointly by Manitoba Hydro, Fisheries and Oceans Canada, and Manitoba Water Stewardship. The City of Winnipeg committed to provide $50.0 in fiscal year 2006/2007 and 2007/2008. Manitoba Hydro also committed to provide $200.0 in each of the next four years.
Collaborative science research on Lake Winnipeg	$11.9	Manitoba Water Stewardship, Fisheries and Oceans Canada, and Environment Canada agreed to develop at least a five year science plan for Lake Winnipeg. Issues on Lake Winnipeg include loading of excessive nutrients, *E. coli* bacteria at beaches, and continued sound management of the highly productive commercial fishery.
Lake Winnipeg E. coli research	$98.6	Specific research has been conducted since 2003 to identify the main source of *E. coli* at Lake Winnipeg beaches and the mechanism by which *E. coli* are transferred from this source to bathing areas. Although the investigation continued and research was conducted throughout the 2005 bathing season, additional work is required to test a predictive model that would allow managers to predict those times when densities of *E. coli* would be elevated. Samples will also be collected to expand the DNA library used to identify animal sources of E. coli thereby reducing the number of unknown sources. Emphasis will be placed on submitting additional source reference material found in proximity to Lake Winnipeg. The goal of much of this work is to protect human health, provide scientific data to support management decisions, and provide sufficient scientific data to support a model that will provide the bathing public with real-time, daily predictability of *E. coli* levels. At present, data can only be provided 24 hours after samples are taken. It is anticipated that the impact of these actions will provide the public with real-time predictions of *E. coli* densities.
Clean beaches program	$2.5	In 2004/05, a program was launched to provide information to individuals, municipalities, and others on measures that can be taken to protect both the health of individual bathers and to reduce bacterial contamination of beach sand. In fiscal year 2005/06, signage and web-based information was developed to better reflect the results of scientific research conducted in 2004/2005. Permanent signage was placed on all beaches in Manitoba where *E. coli* was routinely sampled. As part of the program, brochures were produced and provided to Rural Municipalities, regional government offices, and Provincial Parks. Additional printing of the brochure was required for the 2006/2007 fiscal year, and production of additional signs were required due to normal damage and vandalism. In future years, existing signing will need to be replaced or updated.
Water quality sampling at Whiteshell Fish	$20.6	Each year, the Whiteshell hatchery produces 700 thousand trout fry and 15 million walleye fry for stocking into sport fishing lakes, and maintains trout brood stock all year. Tanks, troughs and raceways at the hatchery are

Project	Amount ($000s)	Description
Hatchery		cleaned daily and untreated fish waste and food products are discharged directly into the Whiteshell River between West Hawk and Caddy lakes. Nutrient loading has never been quantified but is undoubtedly adding nitrogen, phosphorus and ammonia to the river. Given the Department's mission statement emphasizing water quality and priority initiatives aimed at reducing nutrient loading in the Lake Winnipeg watershed, it is important that Government ensure its own facilities are not detrimental to water quality.
In-stream flow reserves studies	$11.0	To date, flows in rivers have exceeded demand for allocatable water but the amount of available water decreases as development increases. The amount of allocatable water has typically been determined using minimum in-stream flows for sewage dilution. Minimum in-stream flows fail to provide intraannual and interannual flow variability which result in the ecological functions and processes necessary for the sustainability of healthy aquatic ecosystems. Moreover, *The Water Protection Act* amended *The Water Rights Act* to include the consideration of in-stream flows to ensure that aquatic ecosystems are protected and maintained. An effective in-stream flow program will require a well coordinated, interdisciplinary team with adequate staff, training, and funding to address all in-stream flow and related issues that fall under Water Stewardship's responsibilities. The province conducted an in-stream flow study of the Assiniboine River resulting in flow recommendations from April to September for medium and low flow water years. The $80,000 will support studies and related expenses for the work directed by one additional FTE dedicated to developing in-stream flows.
Cedar Lake fishery restructuring	$400.0	The Chemawawin First Nation and the commercial fishers of Cedar Lake have voluntarily agreed to close the commercial fishery for 5 years to allow a severe decline in walleye production to recover. Manitoba has agreed to participate to cost-share this initiative with Indian and Northern Affairs Canada. As part of this initiative, 40 licences were purchased from fishers which removed 40 fishers from the lake. The associated quota was re-allocated to the remaining commercial fishers while a portion was held for conservation purposes. This initiative provided the remaining commercial fishers with greater economic benefits and provided greater certainty that future economic returns will be stable from management of the fishery on a sustainable basis.
Manitoba Commercial Inland Fishers' Federation	$25.0	Manitoba Water Stewardship has committed to provide on-going support to the Manitoba Commercial Inland Fishers' Federation. This created a single entity that Manitoba Water Stewardship interacted with which represents all commercial fishers' activities in Manitoba.
Legal and Consulting Services - Transboundary Water Issues	$287.7	Costs were incurred each year for legal counsel and for professional consultants to assist Manitoba respond to transboundary water threats such as Devils Lake and Garrison diversion projects.
Peguis/Fisher River flood modeling & protection works	$691.4	Work continued during fiscal year 2006/2007 to complete the hydrologic modeling studies being implemented on the Fisher River through the Peguis First Nation. This flood protection program was initiated in fiscal year 2005/2006 through a 4-year cost-shared program with Canada.
Lake Winnipeg Erosion Technical Committee	$20.9	The Lake Winnipeg Shoreline Erosion Technical Committee provides technical advice to landowners regarding effective shoreline erosion control methods. This committee conducted three shoreline erosion demonstration

Project	Amount ($000s)	Description
		projects at Winnipeg Beach, Traverse Bay, and Hnausa. The identified budget is for operating costs which included office space and an honorarium for a Chairperson.
Ice jam mitigation	$65.6	Manitoba committed to work with municipalities between the City of Winnipeg and Lake Winnipeg to operate the Amphibex in order to break ice immediately prior to normal spring melt in order to minimize the potential for local flooding due to ice-jams.

Table WS.1

25.4 Water Stewardship Initiatives

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Salaries and Employee Benefits	0.00		0.0	0.0	
Other Expenditures	3,265.1		3,783.4	(518.3)	1
Total Sub-Appropriation	3,265.1		3,783.4	(518.3)	

1. Under expenditure is due to delay in modeling studies on the Peguis/Fisher River First Nation's Flood Protection project and related operations; as well as delays in payouts of the "Beneficial Management Practices Top-Up Program as a result of timing of processing of BMP requests from farmers.

Minor Capital Projects

Projects included purchase of equipment related to fisheries programs, purchase of surface water and ground water instrumentation, the groundwater test drilling program and related water quality analysis, purchase of equipment and instrumentation for dam safety analyses, purchase of material to repair culvert and bridge crossings over Provincial waterway drains, and replacement of three crossings over provincial waterway channels.

Table MC.1

25.7 Minor Capital Projects

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Other Expenditures	244.6		284.7	(40.1)	
Total Sub-Appropriation	244.6		284.7	(40.1)	

Costs related to Capital Assets

The department expended the annual amortization costs of all completed assets, based on the useful life of each asset. Assets purchased or constructed in 2006/07 were expended at one-half the annual amortization rate. The amortization expense also included the portion of corporate information technology projects attributable to the department.

Desktop Services

Table CI.1
25.8 (a) Desktop Services

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Amortization Expense	22.2		22.2	0.0	
Enterprise Software Licenses	38.4		38.5	(0.1)	
Total Sub-Appropriation	60.6		60.7	(0.1)	

General Assets

Capital Investment – General Assets provides for the refurbishment and upgrade of facilities and the acquisition of machinery and equipment.

Equipment purchases in 2006/07 included the purchase of a large-format scanner to enable digitizing of maps and plans; a survey-grade GPS unit for efficiently acquiring topographic information related to water control infrastructure projects; and a generator, boats, instrumentation and equipment in support of various fisheries programs.

Table CI.2
25.8(b) General Assets

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTEs	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
Amortization Expense	157.5		170.7	(13.2)	
Interest Expense	26.0		31.0	(5.0)	
Total Sub-Appropriation	183.5		201.7	(18.2)	

Part B CAPITAL INVESTMENT

General Assets

Capital Investment – General Assets provides for the refurbishment and upgrade of facilities and the acquisition of machinery and equipment.

Equipment purchases in 2006/07 totaled $430.6 and include:

Regional Boats and Motors – Fisheries Branch	
Western Region Boat	$ 25.4
Eastern Region Boat	23.7
Eastern Region Motor	16.5
NW Region Motor	17.4
NE Region Motor	13.7
Other General Asset Purchases	
Digitizing Maps/Plans	20.3
Topographic Survey instrumentation	60.2
Electro-Fisher & Field Probe	11.2
Swan Creek Hatchery Incubating Batteries	137.3
Lake Winnipeg Fisheries & Water Quality Sampling Boat	54.9
Swan Creek Hatchery Generator	35.9
Digital Inclinometer System	14.1

Table CA.1
Part B General Assets

Expenditures by Sub-appropriation	Actual 2006/07 $(000)	FTE's	Estimate 2006/07 $(000)	Variance Over/(Under) $(000)	Expl. No.
B.	430.6		441.0	10.4	

Sustainable Development Activities and Accomplishments

The Department of Manitoba Water Stewardship exemplifies commitment to the Sustainable Development Principle of **Stewardship.** The Department in its Vision, Mission and Values clearly articulates its commitment to ensuring today's decisions are balanced with tomorrow's consequences recognizing that Manitobans are caretakers of water resources for the benefit of present and future generations.

Activities of the Department that incorporate or apply Sustainable Development Principles and Guidelines.

The Water Protection Act was proclaimed in force on January 1, 2006, the first act of its kind in Canada. *The Water Protection Act* represents the single most significant action of the Department to ensure the Principles and Guidelines of Sustainable Development are incorporated into and applied in its everyday operations. *The Water Protection Act* embodies and articulates Sustainable Development Guidelines and Principles in establishing the legislative framework around which Manitoba's water resources will be protected. It provides a key legislative and policy mandate for the Department of Water Stewardship.

SUSTAINABLE DEVELOPMENT PRINCIPLES:

1. Integration of Environmental and Economic Decisions:

- **Economic decisions should adequately reflect environmental, human health and social effects.**
- **Environmental and health initiatives should adequately take into account economic, human health and social consequences.**

Water Stewardship staff reviewed proposed licenses, permits and development plans under the Environment Act, Municipal and Planning District Development Plans and amendments, and Municipal subdivisions to ensure the integrity and sustainability of Manitoba's drinking water, commercial water resources, fisheries, wetlands and riparian areas. Ensuring that Manitobans and their investments are protected from water related hazards and shortages are an important component of the licensing and review process.

2. Stewardship:

- **Water and fish resources should be managed for the equal benefit of present and future generations.**
- **Manitobans are caretakers of our water and fish resources for the benefit of present and future generations.**

The Office of Drinking Water provides a strong stewardship function in managing drinking water systems throughout Manitoba for today and into the future. This is accomplished through regulatory development and enforcement, emergency investigations, monitoring, technical support, testing services and operator guidance and support.

The maintenance and operation of drainage systems and activities, dams and dikes is a critical stewardship function of Water Stewardship. The proper construction and operation of infrastructure for the benefit of individuals, communities, industry and the environment is essential.

Working together with irrigators, high levels of compliance on water use reporting has occurred. This ensures reliable water use records and an enhanced ability to manage these resources sustainably into the future.

3. Shared Responsibility and Understanding:

- **Manitobans should acknowledge responsibility for sustaining water and fish resources with each being accountable for decisions and actions in a spirit of partnership and cooperation.**
- **Manitobans share a common economic, physical and social environment.**

- **Manitobans should understand and respect differing economic and social views, values, traditions and aspirations.**
- **Manitobans should consider the aspirations, needs and views of the people of the various geographical regions and ethnic groups in Manitoba, including aboriginal peoples, to facilitate equitable management of Manitoba's common resources.**

The Office of Drinking Water shares responsibilities to provide safe drinking water with water system owners and operators across Manitoba. This partnership and cooperation is demonstrated through outreach activities, presentations and feedback on annual water system operations.

Water control infrastructure (waterway and drainage systems, dams, crossings, etc) affects the well being and sustainability of many communities and individuals. Sharing technical expertise with municipalities and conservation districts, collaborating with local technical advisory groups and cost-sharing developments are examples of Water Stewardship's cooperative efforts.

Water Stewardship continues to work with various stakeholders in the establishment of basin, watershed and aquifer management plans, and to provide administrative assistance to several management advisory boards.

The department relies on water level and stream flow data collection under the Canada-Manitoba Hydrometric Agreement for operation of water control works, flood forecasting and water management investigations and hydrologic studies.

Water Stewardship supports and facilitates the work of the Lake Winnipeg Stewardship Board and the Lake Winnipegosis Stewardship Board.

Water Stewardship and Indian and Northern Affairs Canada entered into the Canada-Manitoba Partnership Agreement on Fisher River Flood Protection in August 2005. The Agreement enables Canada and Manitoba to implement, in partnership with Peguis First Nation, Fisher River First Nation, the Communities of Dallas/Red Rose, Harwill, and Fisher Bay, and the Rural Municipality of Fisher, a program to protect people and property in the Fisher River watershed from the ongoing risk of flooding.

Water Stewardship continues to work with First Nations and other stakeholders to develop fisheries management approaches that accommodate constitutional obligations and other stakeholder interests.

Water Stewardship regional staff completed a draft management plan for Dauphin Lake in partnership with Western Regional Tribal Council (WRTC) in an attempt to co-manage harvest of walleye in Dauphin Lake.

Water Stewardship/Conservation staff worked with fishers to develop a fisheries management plan to assure more sustainable resource harvesting practices on Cedar Lake.

Manitoba's contribution of $800.0 to the restructuring of the Cedar Lake fishery will help ensure that the fish stock benefits gained from the five year closure is sustainable. This program resulted in 40 of the 81 fishers transferring out of the fishery and a conservation hold back of approximately 10% on walleye quota for conservation purposes.

4. Prevention:

- **Manitobans should anticipate, and prevent or mitigate, significant adverse economic, environmental, human health and social effects of decisions and actions, having particular careful regard to decisions whose impacts are not entirely certain but which, on reasonable and well-informed grounds, appear to pose serious threats to the economy, the environment, human health and social well-being.**

Existing ongoing licensing systems for water allocation, development and drainage all enhance the ability of Water Stewardship to anticipate, prevent or mitigate significant adverse effects of activity on drinking water, commercial water sources, fisheries, wetlands and riparian areas.

The Red River Floodway Act was proclaimed, initiating the expansion of the Red River Floodway to provide protection to Winnipeg from a 1 in 700 year flood event.

Water Stewardship continued to work toward protection of endangered aquatic species in Manitoba by working with the federally appointed Committee on the Status of Endangered Wildlife in Canada (COSEWIC).

Water Stewardship operated an ambient monitoring network on major streams, lakes and recreational beaches, assisted by volunteers, regional personnel and organizations, such as conservation districts. Over 50 sites across Manitoba were regularly monitored for up to 100 chemical parameters, and 60 beaches were monitored, with information posted on the department's website.

5. Conservation and Enhancement:

- **Maintain the ecological processes, biological diversity and life-support systems of the environment.**
- **Harvest renewable resources on a sustainable yield basis.**
- **Make wise and efficient use of renewable and non-renewable resources.**
- **Enhance the long-term productive capability, quality and capacity of natural ecosystems.**

The present water allocation licensing process and associated hydrological yield analysis has resulted in significant numbers of applications being placed on permanent hold on aquifers where sustainable yields are fully allocated.

In annually permitting and licensing water use and fish harvest the Department ensures that the sustainability of those resources is not compromised.

Water Stewardship continued to fund a BMP Top-Up Incentive Program in partnership with the Canada-Manitoba Farm Stewardship Program (CMFSP), which is administered by Prairie Farm and Rehabilitation Administration (AAFC-PFRA), and Manitoba Agriculture, Food, and Rural Initiatives (MAFRI). This partnership will operate until March 31, 2008.

A Riparian Easements Delivery Program continued to operate in partnership with Manitoba Habitat Heritage Corporation (MHHC) to protect water sensitive lands, including wetlands, riparian areas and fragile landscapes, through Conservation Easement Agreements.

Conservation District Secretariat Staff worked with eighteen Conservation Districts in the development and delivery of water and soil conservation programs and projects.

The Fisheries Enhancement Initiative has funded 292 projects directed at enhancing fish populations and their habitat as well as funding educational opportunities.

6. Rehabilitation and Reclamation:

- **Endeavour to repair damage to or degradation of the environment.**
- **Consider the need for rehabilitation and reclamation in future decisions and actions.**

Water Stewardship continued to provide co-ordination and planning assistance for a number of watershed/stream restoration projects in Manitoba. An integrated planning approach joins local stakeholder groups and agencies in restoring the health and functions of watersheds. Integrated watershed management plans are underway in the Shell River Watershed, Arrow-Oak River Watershed, Assiniboine-Birdtail River Watershed, Little Saskatchewan River Watershed, Seine River Watershed, LaSalle River Watershed, and the Icelandic River and Washow Bay Creek Watershed.

7. Global Responsibility:

- **Manitobans should think globally when acting locally, recognizing that there is economic, ecological and social interdependence among provinces and nations, and working cooperatively,**

within Canada and internationally, to integrate economic, environmental, human health and social factors in decision-making while developing comprehensive and equitable solutions to problems

The Office of Drinking Water participates in national level committees to ensure the Canadian Drinking Water Quality Guidelines benefit Manitobans as well as all Canadians. Participation in watershed and basin planning ensures that drinking water issues that transcend local, regional and provincial boundaries are addressed.

Water Stewardship continued to participate in and support the Red River Basin Commission dedicated to the environmental, economic and social sustainability of the Red River Valley.

Water Stewardship continued its partnership agreement with Natural Resources Canada to implement the National Hydrographic Network.

Water Stewardship participates on a number of inter-provincial and international boards and committees directed at the sustainable management of shared waters within the Hudson Bay Drainage Basin, including the Prairie Provinces Water Board, the Red River Basin Commission and the Lake of the Woods Control Board.

SUSTAINABLE DEVELOPMENT GUIDELINES

1. **Efficient Uses of Resources:**
   - **Encouraging and facilitating development and application of systems for proper resource pricing, demand management and resource allocation together with incentives to encourage efficient use of resources.**
   - **Employing full-cost accounting to provide better information for decision makers.**

Water Stewardship participated on a sub-committee of the Canadian Council of Ministers of the Environment on Economic Instruments and Demand Side Management to support the efficient use of water.

2. **Public Participation:**
   - **Establishing forums which encourage and provide opportunity for consultation and meaningful participation in decision making processes by Manitobans.**
   - **Endeavouring to provide due process, prior notification and appropriate and timely redress for those adversely affected by decisions and actions.**
   - **Striving to achieve consensus amongst citizens with regard to decisions affecting them.**

Technical advisory committees and community meetings were held to work to alleviate flooding on several First Nations lands. Such forums facilitated the identification of solutions that would sustain communities into the future.

Six new Water Planning Authorities were designated as per *The Water Protection Act* to develop, in consultation with stakeholders, watershed management plans for the protection and management of surface and ground water resources.

The Department established the Manitoba Water Council to provide Ministerial advice on policies, programs, plans and legislation needed to achieve Manitoba Water Stewardship's vision of "the best water for all life and lasting prosperity". The Council will help build a broad-based consensus among Manitobans on sustainable solutions for water protection and water management.

Consultations with Manitobans as part of the process for developing the following regulation:

- Water Quality Management Zones for Nutrients to protect water quality by preventing the over application of nutrients to the landscape and by minimizing the risk of loss to senstivie areas. Nine public meetings were held in eight locations across Manitoba in February and March 2006.

3. Access to Information:

- **Encouraging and facilitating the improvement and refinement of economic, environmental, human health and social information.**
- **Promoting the opportunity for equal and timely access to information by all Manitobans.**

Water Stewardship provides information covering all aspects of the water resources to the public through the Water Stewardship website. Specific information is provided through open houses and public meetings.

Water Stewardship staff continued to participate in *Manitoba Envirothon* by working with the test-writing committee, preparing questions, and assisting in the field day and oral components. *Envirothon* is an annual Olympic-style academic and environmental program. High school students (Senior I to IV) are tested in four discipline areas (aquatics, forestry, soils, and wildlife) and the annual theme.

A total of 192 flood sheets were issued in 2005 for various rivers from the U.S. boundary to the Churchill River. These daily reports were also posted on the Water Stewardship web site.

Whiteshell Fish Hatchery Visitor Centre gave tours to approximately 5,000 people from June to the September long weekend. Interpretative exhibits include information on species reared at the hatchery, life stages of fish, how water is used, history of the hatchery, aquatic invasive species, and ecosystem interaction.

4. Integrated Decision Making and Planning:

- **Encouraging and facilitating decision making and planning processes that are efficient, timely, accountable and cross-sectoral and which incorporate an inter-generational perspective of future needs and consequences.**

Water Stewardship continued to develop the template and model for Integrated Water Planning and Management in the Province. This approach will ensure the integration decision making and management of land, water and related resources.

Water Stewardship partnered with conservation districts to initiate seven watershed plans. Water Stewardship and the individual conservation districts signed memorandums of understanding outlining agreement on the process and timeframe to develop a watershed plan and embarked on the planning process, starting with stakeholder meetings and state of the watershed assessments.

In 2006/07 provincial grants totalling $4,400,000 were provided to 18 CDs to support the Conservation Districts Programs in areas, such as water management, soil conservation, water storage, wildlife habitat, historic resources and recreation, public education, administration and a variety of other programs that promote sustainable resource management.

5. Waste Minimization and Substitution:

- **Encouraging and promoting the development and use of substitutes for scarce resources where such substitutes are both environmentally sound and economically viable.**
- **Reducing, reusing, recycling and recovering the products of society.**

6. Research and Innovation:

- **Means encouraging and assisting the researching, development, application and sharing of knowledge and technologies which further our economic, environmental, human health and social well-being.**

Water Stewardship continued to support the Lake Winnipeg Research Consortium through grants and in-kind contributions.

The Water Stewardship Fund provided financial assistance for 18 projects to develop, implement and promote activities and research that maintain or improve the quality and availability of Manitoba's water.

Activités et réalisations au chapitre du développement

Le ministère de la Gestion des ressources hydriques du Manitoba illustre par de nombreux exemples la façon dont il applique le principe de développement durable de la **supervision de la gestion de l'environnement**. Dans sa vision, sa mission et ses valeurs, le ministère traduit clairement son engagement à veiller à ce que les décisions d'aujourd'hui tiennent compte des conséquences futures, reconnaissant le fait que les Manitobains sont les dépositaires de leurs ressources hydriques pour le bien des générations actuelles et à venir.

Activités du ministère qui intègrent ou appliquent les principes et les directives de développement durable

Entrée en vigueur le 1er janvier 2006, la *Loi sur la protection des eaux* est la première du genre au Canada. Cette loi représente la principale grande mesure adoptée par le ministère pour intégrer les principes et les directives de développement durable à ses activités quotidiennes et les mettre en application. La *Loi sur la protection des eaux* concrétise et articule les principes et les directives de développement durable, en ce sens qu'elle établit le cadre législatif qui régit la façon dont les ressources hydriques du Manitoba sont protégées. Elle prévoit l'essentiel du mandat législatif et politique du ministère de la Gestion des ressources hydriques.

LES PRINCIPES DU DÉVELOPPEMENT DURABLE :

1. L'intégration des décisions environnementales et économiques :

- **Les décisions économiques devraient refléter de façon adéquate leurs conséquences sur l'environnement, la santé humaine et la société.**
- **Les initiatives en matière d'environnement et de santé devraient prendre en compte de façon adéquate leurs conséquences sur l'économie, la santé humaine et la société.**

Le personnel de Gestion des ressources hydriques Manitoba examine les demandes de licences et de permis ainsi que les plans d'aménagement proposés en vertu de la *Loi sur l'environnement*, les plans d'aménagement des municipalités et des districts de planification, les modifications à ces plans, de même que le lotissement municipal, pour garantir l'intégrité et la durabilité de l'eau potable, des ressources hydriques commerciales, de la pêche, des terres humides et des zones riveraines du Manitoba. Le présent processus d'examen des demandes et de délivrance de permis vise principalement à assurer la protection des Manitobains et de leurs investissements contre les risques associés à l'eau et les pénuries d'eau.

2. La supervision de la gestion de l'environnement :

- **Les ressources en eau et en poissons devraient être gérées tant pour le bien des générations actuelles que pour celui des générations à venir.**
- **Les Manitobains sont les dépositaires de leurs ressources en eau et en poissons pour le bien des générations actuelles et à venir.**

Le Service de l'eau potable gère les réseaux d'approvisionnement en eau potable du Manitoba à court terme et à long terme, assurant ainsi une part essentielle de la supervision de la gestion de l'environnement. Parmi les activités du Service, citons l'élaboration de règlements et leur mise en application, la réalisation d'enquêtes d'urgence, la surveillance, le soutien technique, les services d'analyse, et l'encadrement et le soutien des exploitants.

Gestion des ressources hydriques Manitoba assure également la gestion de l'entretien et de l'exploitation des systèmes et des activités de drainage, ainsi que des barrages et des digues. Le ministère veille également à la construction et à l'exploitation adéquates de l'infrastructure, et ce, au profit des particuliers, des collectivités, de l'industrie et de l'environnement.

De concert avec les responsables de l'irrigation, le ministère a obtenu un excellent niveau de respect des exigences concernant les rapports sur l'utilisation de l'eau. Ces rapports permettent d'établir des données fiables sur l'utilisation de l'eau et améliorent la capacité à long terme de gérer la durabilité de ces ressources.

3. La responsabilité partagée et la compréhension :

- **Les Manitobains devraient reconnaître qu'ils sont responsables du développement durable des ressources en eau et en poissons, chacun étant responsable de prendre des décisions et d'agir dans un esprit de collaboration et de coopération.**
- **Les Manitobains partagent un environnement économique, physique et social commun.**
- **Les Manitobains devraient comprendre et respecter les divers points de vue, valeurs, traditions et aspirations en matière économique et sociale.**
- **Les Manitobains devraient prendre en compte les aspirations, les besoins et les points de vue des diverses régions et des divers groupes ethniques du Manitoba, notamment ceux des peuples autochtones, pour faciliter une gestion équitable des ressources communes de la province.**

Le Service de l'eau potable assure une alimentation en eau potable de qualité en collaboration avec les exploitants et les propriétaires de réseaux d'alimentation en eau du Manitoba. Ce partenariat prend la forme d'activités de sensibilisation, de présentations et d'une rétroaction sur les activités annuelles du réseau d'alimentation en eau.

Les ouvrages d'aménagement hydraulique (cours d'eau et systèmes de drainage, barrages, ponts, etc.) sont liés au bien-être des personnes et à la durabilité de nombreuses collectivités. L'échange de compétences techniques avec les municipalités et les districts de conservation, la collaboration avec des groupes-conseils techniques locaux et le partage du coût des aménagements sont des exemples des efforts concertés de Gestion des ressources hydriques Manitoba.

De plus, le ministère continue de travailler avec divers intervenants à l'établissement de plans de gestion des bassins, des bassins hydrographiques et des aquifères, et de fournir un soutien administratif à plusieurs conseils consultatifs sur la gestion.

Le ministère utilise les données sur le débit et le niveau d'eau recueillies dans le cadre de l'Accord relatif à l'hydrométrie entre le Canada et le Manitoba pour l'exploitation des ouvrages d'aménagement hydraulique, la prévision des inondations, les recherches sur la gestion de l'eau et les études hydrologiques.

Gestion des ressources hydriques Manitoba soutient et facilite le travail du Conseil de gestion du lac Winnipeg et du Conseil de gestion du lac Winnipegosis.

En août 2005, Gestion des ressources hydriques Manitoba et Affaires indiennes et du Nord Canada ont conclu l'Entente d'association Canada-Manitoba sur la protection de la rivière Fisher contre les inondations. Cette entente permet au Canada et au Manitoba de mettre en œuvre, en collaboration avec la Première nation Peguis, la Première nation de Fisher River, les collectivités de Dallas-Red Rose, d'Harwill et de Fisher Bay et la municipalité rurale de Fisher, un programme visant à protéger la population et les biens du bassin hydrographique de la rivière Fisher contre les risques continus d'inondation.

Le personnel du secrétariat du Programme de districts de conservation a travaillé de concert avec 18 districts de conservation à l'élaboration et à la mise en œuvre de programmes et de projets de conservation de l'eau et des sols.

Gestion des ressources hydriques Manitoba continue de travailler avec les Premières nations et d'autres parties concernées afin de mettre en place des mesures de gestion des pêches qui respectent les obligations constitutionnelles ainsi que les intérêts de toutes les parties.

En partenariat avec le Conseil tribal de la région de l'Ouest, le personnel régional de Gestion des ressources hydriques Manitoba a rédigé un projet de plan de gestion du lac Dauphin pour tenter de gérer conjointement la récolte du doré jaune.

Le personnel de Gestion des ressources hydriques Manitoba et de Conservation Manitoba a travaillé avec les pêcheurs à l'établissement d'un plan de gestion des pêches permettant d'assurer des pratiques d'exploitation des ressources plus durables sur le lac Cedar.

Le montant de 800 000 $ que le Manitoba a consacré à la restructuration de la pêcherie du lac Cedar devrait contribuer à maintenir l'augmentation des stocks de poissons obtenue grâce à la fermeture du lac pendant cinq ans. Grâce à ce programme, 40 des 81 pêcheurs ont quitté la pêcherie, et environ 10 % des dorés jaunes permis ont été retenus à des fins de conservation.

4. Prévention :

- **Les Manitobains devraient prévoir les conséquences néfastes d'envergure pour l'économie, l'environnement, la santé humaine et la société des décisions prises et des actions accomplies, les prévenir et en limiter les effets, en tenant tout particulièrement compte des décisions dont les conséquences ne sont pas parfaitement définies, mais qui, en se fondant sur des motifs raisonnables et bien informés, semblent créer des menaces potentiellement graves pour l'économie, l'environnement, la santé humaine et le bien-être social.**

Les mécanismes de délivrance de permis pour la répartition, l'aménagement et le drainage des eaux aident mieux que jamais le ministère de la Gestion des ressources hydriques du Manitoba à prévoir, à prévenir ou à limiter les effets néfastes considérables des activités sur l'eau potable, les ressources hydriques commerciales, la pêche, les terres humides et les zones riveraines.

L'entrée en vigueur de la *Loi sur le canal de dérivation de la rivière Rouge* a marqué le début de l'agrandissement du canal de dérivation de la rivière Rouge destiné à protéger Winnipeg contre les inondations qui risquent de survenir une fois tous les 700 ans.

Gestion des ressources hydriques Manitoba a poursuivi son travail de protection des espèces aquatiques menacées de disparition au Manitoba en collaboration avec le Comité sur le statut des espèces menacées de disparition au Canada (CSEMDC), dont les membres sont nommés par le gouvernement fédéral.

De plus, le ministère a exploité un réseau de surveillance de l'air ambiant sur les cours d'eau, lacs et plages de plaisance d'importance, avec l'aide de bénévoles, et de son personnel régional et d'organismes locaux, tels les districts de conservation. Ainsi, jusqu'à 100 paramètres chimiques ont fait l'objet de contrôles réguliers à plus de 50 endroits du Manitoba, et 60 plages ont été surveillées. Les données obtenues ont été affichées sur le site Web du ministère.

5. Conservation et promotion :

- **Maintenir les processus écologiques, la biodiversité et le milieu vital de l'environnement.**
- **Exploiter les ressources renouvelables en visant un rendement équilibré.**
- **Faire une utilisation sage et efficace des ressources renouvelables et non renouvelables.**
- **Promouvoir la capacité de production, la qualité et la capacité à long terme des écosystèmes naturels.**

Le mécanisme actuel de délivrance de permis pour la répartition des eaux et les analyses du rendement hydrologique qui y sont associées ont entraîné la retenue permanente de nombreuses demandes concernant les aquifères dont le rendement équilibré était complet.

En délivrant annuellement des permis et des licences pour encadrer l'utilisation de l'eau et la récolte de poissons, le ministère assure la durabilité de ces ressources.

Gestion des ressources hydriques Manitoba a continué de financer un programme d'encouragement complémentaire sur les pratiques de gestion bénéfiques (PGB), de concert avec le Programme de gérance agroenvironnementale Canada-Manitoba (PGACM), un programme géré par l'Administration du rétablissement agricole des Prairies (ARAP) et Agriculture, Alimentation et Initiatives rurales Manitoba. Ce partenariat continuera jusqu'au 31 mars 2008.

La mise en œuvre d'un programme de servitudes riveraines se poursuit en collaboration avec la Société protectrice du patrimoine écologique du Manitoba dans le but de protéger les terres sensibles à l'eau, dont les terres humides, les zones riveraines et les paysages fragiles, grâce à des accords sur les servitudes du patrimoine.

L'Initiative de mise en valeur de la pêche a permis de financer 292 projets visant à développer les stocks de poissons et leur habitat, ainsi que des projets éducatifs.

6. Récupération et remise en état :

- **S'engager à remédier aux dommages et à la détérioration qu'a subis l'environnement.**
- **Prendre en compte les besoins en matière de récupération et de remise en état avant de prendre de nouvelles décisions ou d'accomplir de nouvelles actions.**

Gestion des ressources hydriques Manitoba a continué à appuyer la coordination et la planification de plusieurs projets de restauration des bassins hydrographiques et des cours d'eau du Manitoba. À cet égard, les groupes d'intérêt et organismes locaux travaillent en partenariat selon une méthode de planification intégrée pour rétablir la santé et les fonctions des bassins hydrographiques. Des plans d'aménagement des bassins hydrographiques ont été mis en œuvre dans les bassins hydrographiques suivants : rivière Shell, rivières Arrow et Oak, rivières Assiniboine et Birdtail, rivière Little Saskatchewan, rivière Seine, rivière LaSalle, et rivière Icelandic et ruisseau Washow Bay.

7. Responsabilité planétaire :

- **Les Manitobains devraient adopter un point de vue planétaire lorsqu'ils accomplissent un geste en un lieu donné, en reconnaissant qu'il n'existe aucune frontière à l'économie et à l'environnement et qu'il existe une interdépendance écologique et économique entre les provinces et les nations; ils devraient travailler en collaboration, à l'intérieur du Canada et sur la scène internationale, pour accélérer la fusion des facteurs économiques, environnementaux, de santé et sociaux à prendre en compte dans la prise des décisions tout en élaborant des solutions équitables et exhaustives pour régler les problèmes.**

Le Service de l'eau potable siège à des comités nationaux afin de s'assurer que les Recommandations pour la qualité de l'eau potable au Canada profitent tant aux Manitobains qu'à l'ensemble des Canadiens. Dans le cadre de sa participation à la planification des bassins hydrographiques et autres bassins, le Service contribue à résoudre des questions relatives à l'eau potable qui dépassent les limites locales, régionales et provinciales.

Gestion des ressources hydriques Manitoba a continué à soutenir la Commission du bassin de la rivière Rouge, qui se consacre à la durabilité environnementale, économique et sociale de la vallée de la rivière Rouge.

Gestion des ressources hydriques Manitoba maintient son entente d'association conclue avec Ressources naturelles Canada afin de mettre en place le Réseau hydrographique national.

Gestion des ressources hydriques Manitoba a participé à plusieurs commissions et comités interprovinciaux et internationaux axés sur la gestion durable des eaux transfrontières situées dans le bassin de drainage de la baie d'Hudson, notamment à la Commission des eaux des provinces des Prairies, à la Commission du bassin de la rivière Rouge et à la Commission de contrôle du lac des Bois.

DIRECTIVES DE DÉVELOPPEMENT DURABLE

1. Utilisation efficace des ressources :

- **Encourager et faciliter l'élaboration et l'application de systèmes permettant une détermination juste du prix des ressources, une régulation de la demande et une répartition des ressources liée à des incitations à leur utilisation efficace.**
- **Appliquer la méthode du coût de revient complet pour permettre de mieux renseigner les décideurs.**

Gestion des ressources hydriques Manitoba a siégé à un sous-comité du Conseil canadien des ministres de l'environnement s'intéressant aux instruments économiques et à la gestion axée sur la demande afin d'appuyer une utilisation efficace de l'eau.

2. Participation du public :

- **Créer des forums en vue d'encourager la consultation des Manitobains et leur participation véritable au processus décisionnel.**
- **S'engager à respecter une procédure équitable et à accorder un avis préalable aux personnes dont les intérêts sont affectés de manière défavorable par des décisions et des actions.**
- **Mettre tout en œuvre pour réaliser un consensus parmi les citoyens sur les décisions qui les concernent.**

Cette année, des comités consultatifs techniques ont été formés et des rencontres communautaires ont eu lieu pour contribuer à atténuer les effets des inondations sur plusieurs terres des Premières nations. Ces forums ont aidé à trouver des solutions qui soutiendront les collectivités à l'avenir.

Des consultations auprès des Manitobains sont en cours dans le cadre du processus d'élaboration des règlements suivants :

- Les Manitobains participent à des portes ouvertes sur la réduction de l'excès d'éléments nutritifs dans l'environnement issus des engrais cosmétiques et des produits d'entretien ménager, notamment grâce à des solutions comme l'achat de produits sans phosphate.

3. Accès à l'information :

- **Encourager et faciliter l'amélioration de l'information de nature économique, environnementale, sanitaire et sociale.**
- **Promouvoir, pour tous les Manitobains, un accès égal et rapide à l'information.**

À l'aide de son site Web, Gestion des ressources hydriques Manitoba donne à la population des renseignements sur tous les aspects des ressources en eau. Le ministère fournit aussi des renseignements sur des sujets précis à l'occasion de portes ouvertes et d'assemblées publiques.

Le personnel du ministère de la Gestion des ressources hydriques du Manitoba a continué de participer au *Manitoba Envirothon* en siégeant au comité de rédaction du test, en préparant les questions et en prêtant main-forte à l'organisation de la journée et au volet oral. L'*Envirothon* est un programme scolaire et environnemental annuel s'inspirant des Jeux olympiques. Il met à l'épreuve les connaissances d'élèves du secondaire (secondaires 1 à 4) dans quatre disciplines (vie aquatique, foresterie, sols et faune), sur un thème annuel.

En tout, 192 avis d'inondation ont été publiés en 2005 pour différentes rivières situées entre la frontière des États-Unis et la rivière Churchill. Ces rapports quotidiens ont également été affichés sur le site Web du ministère de la Gestion des ressources hydriques du Manitoba.

Le personnel du centre d'accueil de la pisciculture de Whiteshell a fait visiter les lieux à environ 5 000 personnes du mois de juin et au week-end de la fête du Travail. Les panneaux d'interprétation fournissent des renseignements sur les espèces élevées à la pisciculture, les stades du développement des poissons, la façon dont l'eau est utilisée, l'histoire de la pisciculture, les espèces aquatiques envahissantes et les interactions dans l'écosystème.

4. Planification et prise de décision intégrées :

- **Encourager et favoriser les processus de planification et de prise de décisions qui sont efficaces, opportuns, responsables et intersectoriels et qui prennent en compte la perspective transgénérationnelle des conséquences et des besoins futurs.**

Gestion des ressources hydriques Manitoba a poursuivi l'élaboration du modèle de système intégré de gestion et de planification de l'eau dans la province. Ce modèle permettra d'assurer l'intégration de la prise de décisions et de la gestion des sols, de l'eau et des ressources connexes.

En 2006/07, des subventions provinciales atteignant 4 400 000 $ ont été octroyées à 18 districts de conservation afin d'appuyer leurs programmes dans divers domaines, dont la gestion des eaux, la conservation des sols, l'emmagasinement des eaux, l'habitat faunique, les ressources historiques et les loisirs, la sensibilisation de la population, l'administration et différents autres programmes favorisant une gestion durable des ressources.

5. Réduction des déchets et substitution :

- **Encourager et promouvoir le développement et l'utilisation de produits de substitution en remplacement des ressources rares lorsque de tels produits de substitution sont viables tant sur le plan économique qu'environnemental.**
- **Diminuer, réutiliser, recycler et transformer les produits de la société.**

6. Recherche et innovation :

- **Encourager et aider la recherche, le développement, la mise en pratique et le partage des connaissances et des technologies qui contribuent à l'amélioration de notre économie, environnement, état de santé et bien-être social.**

Gestion des ressources hydriques Manitoba a continué à appuyer le Consortium de recherche du lac Winnipeg au moyen de subventions et de contributions en nature.

Le Fonds de gérance des eaux a financé 18 projets visant l'élaboration, la mise en œuvre et la promotion d'activités et de recherches qui maintiennent ou améliorent la qualité et la disponibilité de l'eau au Manitoba.

Revenue and Expenditure Summaries

Table RE.1
Reconciliation Statement

DETAILS	2006/07 ESTIMATES
2006/07 Main Estimates	50,305.5
Main Estimates Authority Transferred to:	
- Manitoba Infrastructure and Transportation	22,664.4
2006/07 ESTIMATE	27,641.1

Table RE.2

Revenue Summary By Source

For the year ended March 31, 2007 with comparative figures for the previous fiscal year

Actual 2005/06	Actual 2006/07	Increase (Decrease)	Source	Actual 2006/07	Estimate 2006/07	Variance	Expl. No.
			OTHER REVENUE:				
296.2	295.4	(0.8)	Fisheries Fees and Sundry	295.4	312.3	(16.9)	1
2,370.1	2,385.7	15.6	Licence Sales by Vendors	2,385.7	2,589.1	(203.4)	2
125,079.4	106,340.1	(18,739.3)	Water Power Rentals	106,340.1	106,000.0	340.1	3
880.2	217.3	(662.9)	Water Resources Sundry	217.3	339.2	(121.9)	4
0.0	0.0	0.0	Drinking Water Fees	0.0	101.8	(101.8)	5
(1.1)	(54.8)	(53.7)	Reconciliation (Reorg)	(54.8)	0.0	(54.8)	
128,624.8	109,183.7	(19,441.1)	Subtotal	109,183.7	109,342.4	(158.7)	
			GOVERNMENT OF CANADA:				
199.8	345.7	145.9	Peguis Flood Mitigation	345.7	470.0	(124.3)	6
199.8	345.7	145.9	Subtotal	345.7	470.0	(124.3)	
128,824.6	**109,529.4**	**(19,295.2)**	**Total**	**109,529.4**	**109,812.4**	**(283.0)**	

Explanation Number:

1. Decrease in Fisheries Fees and Sundry is due to a decline in the strength of the commercial fishing industry resulting in less sales for commercial and bait block licences.

2. Decrease in Licence Sales by Vendors is due to fluctuations in weather and timing of licence purchases.

3. Increase in Water Power Rentals is due to good water supply conditions in the first half of 2006 and strong domestic and export demands for electricity throughout the year.

4. Decrease in Water Resources Sundry is due to changes in the fee structure pursuant to *The Water Rights Act* and related anticipated revenue that was not realized in 2006/07.

5. Variance is due to *The Drinking Water Safety Act* regulations being proclaimed late in the fourth quarter and deferral of fee increases.

6. Decrease in the Peguis Flood Mitigation is due to delayed signing of the contract and waiving of municipal interest for the Rural Municipalities of St. Pierre-Jolys and Franking.

Table EX.1

Expenditure Summary

For fiscal year ended March 31, 2007 with comparative figures for the previous year.

Estimate 2006/07	Appropriation	Actual 2006/07	Actual 2005/06	Increase (Decrease)	Explanation Number
	25-1 Administration and Finance				
30.4	**(a) Minister's Salary**	32.5	29.7	2.8	
	(b) Executive Support				
487.1	Salaries and Employee Benefits	489.9	681.8	(191.9)	1
199.0	Other Expenditures	132.3	185.7	(53.4)	2
	(c) Administration & Financial Services				
269.0	Salaries and Employee Benefits	156.2	122.0	34.2	3
70.5	Other Expenditures	20.7	14.6	6.1	4
	(d) Information Technology Services				
304.4	Salaries and Employee Benefits	316.1	304.1	12.0	
13.9	Other Expenditures	12.9	13.7	(0.8)	
1,374.3	Total 25-1	1,160.6	1,351.6	(191.0)	
	25-2 Ecological Services				
	(a) Administration				
261.8	Salaries and Employee Benefits	262.5	216.5	46.0	5
117.9	Other Expenditures	95.7	100.7	(5.0)	
25.0	Grant Assistance	14.3	15.0	(0.7)	
404.7	Total 25-2a	372.5	332.2	40.3	
	(b) Planning and Coordination				
1,389.4	Salaries and Employee Benefits	1,141.8	1,042.7	99.1	6
270.2	Other Expenditures	290.8	216.0	74.8	7
1,659.6	Total 25-2b	1,432.6	1,258.7	173.9	
	(c) Water Science and Management				
	(1) Administration				
214.1	Salaries and Employee Benefits	212.2	236.7	(24.5)	
156.6	Other Expenditures	169.3	169.3	0.0	
	(2) Groundwater Management				
846.8	Salaries and Employee Benefits	886.9	769.7	117.2	8
540.0	Other Expenditures	437.0	474.5	(37.5)	
	(3) Surface Water Management				
793.2	Salaries and Employee Benefits	726.3	837.0	(110.7)	
169.1	Other Expenditures	168.0	155.3	12.7	
776.3	Canada-Manitoba Agreement for Water	776.3	587.0	189.3	9
	(4) Water Quality Management				
628.5	Salaries and Employee Benefits	526.6	483.3	43.3	
774.7	Other Expenditures	628.9	639.1	(10.2)	
4,899.3	Total 25-2c	4,531.5	4,351.9	179.6	
	(d) Fisheries Branch				
	(1) Administration				
100.2	Salaries and Employee Benefits	99.6	74.3	25.3	10
161.6	Other Expenditures	152.1	308.7	(156.6)	11

Estimate 2006/07	Appropriation	Actual 2006/07	Actual 2005/06	Increase (Decrease)	Explanation Number
	(2) Aquatic Eco-System Management				
1,028.7	Salaries and Employee Benefits	990.2	1,012.4	(22.2)	
187.9	Other Expenditures	188.3	230.8	(42.5)	
	(3) Sport and Commercial Fishing Management				
598.0	Salaries and Employee Benefits	628.3	656.1	(27.8)	
78.0	Other Expenditures	73.7	34.9	38.8	12
	(4) Regional Fisheries Resources				
800.4	Salaries and Employee Benefits	824.8	771.0	53.8	
208.3	Other Expenditures	206.1	201.7	4.4	
410.0	(5) Northern Fisherman's Freight Assistance	410.0	410.0	0.0	
350.0	(6) Fisheries Enhancement Initiative	385.3	346.9	38.4	
3,923.1	Total 25-2d	3,958.4	4,046.8	(88.4)	
	(e) Office of the Drinking Water				
1,054.7	Salaries and Employee Benefits	931.4	1,000.2	(68.8)	
1,079.1	Other Expenditures	554.8	795.9	(241.1)	13
2,133.8	Total 25-2e	1,486.2	1,796.1	(309.9)	
13,020.5	Total 25-2	11,781.1	11,785.7	(4.5)	
	25-3 Infrastructure and Operations				
	(a) Administration				
433.9	Salaries and Employee Benefits	436.3	383.3	53.0	
634.5	Other Expenditures	582.5	601.9	(19.4)	
	(b) Water Licensing				
1,037.9	Salaries and Employee Benefits	1,013.6	806.3	207.3	14
88.7	Other Expenditures	96.6	92.8	3.8	
	(c) Water Control Infrastructure				
578.6	Salaries and Employee Benefits	607.2	711.3	(104.1)	15
63.2	Other Expenditures	90.0	58.7	31.3	16
	(d) Regional Water Operations				
614.5	Salaries and Employee Benefits	399.1	607.4	(208.3)	17
270.0	Other Expenditures	217.2	308.4	(91.2)	18
1,200.0	(e) Waterway Maintenance	991.9	994.2	(2.3)	
4,921.3	Total 25-3	4,434.4	4,564.3	(129.9)	
	Water Stewardship Initiatives				
3,783.4	Total 25-4	3,265.1	2,965.3	299.8	19
	25-6 Community and Watershed Assistance				
4,400.0	(a) Conservation Districts	4,400.0	4,183.0	217.0	
(425.0)	(b) Less: Recoverable from Urban and Rural Economic Development Initiatives	(425.0)	(425.0)	0.0	
3,975.0	Total 25-6	3,975.0	3,758.0	217.0	

Estimate 2006/07	Appropriation	Actual 2006/07	Actual 2005/06	Increase (Decrease)	Explanation Number
	25-7 Minor Capital Projects				
284.7	**(a)** Water Projects	244.6	269.5	(24.9)	
284.7	Total 25-7	244.6	269.5	(24.9)	
	25-8 Costs Related to Capital Assets				
	(a) Desktop Services				
22.2	(1) Amortization Expense – Hardware and Transition	22.2	22.2	0.0	
38.5	(2) Enterprise Software Licenses	38.4	40.9	(2.5)	
	(b) General Assets				
170.7	(1) Amortization Expense	157.5	142.9	14.6	
31.0	(2) Interest Expense	25.9	21.3	4.7	
262.4	Total 25-8	244.0	227.3	16.7	
27,621.6	**TOTAL EXPENDITURES**	**25,104.9**	**24,921.7**	**183.2**	

CAPITAL INVESTMENT:

441.4	**B.18 Capital Investments – General Assets**	**431.5**	**34.0**	**397.5**	20
441.4	**TOTAL CAPITAL INVESTMENT**	**431.5**	**34.0**	**397.5**	

Explanations:

1. Decrease in Executive Support salaries is due to severance paid in 2005/06 and the temporary under filling of one position in 2006/07.
2. Decrease in Executive Support other expenditures is due to one-time costs incurred in 2005/06 including contribution towards the costs of the 1st Annual General Assembly for the Manitoba Commercial Inland Fisheries Foundation, payment to Selymes & Associates, an independent HR consultant, to conduct a review, and travel related to the Devils Lake and transboundary water issues.
3. Increase in Administration and Finance salaries is due to filling positions through the Career Gateway Program, salary recoveries from Conservation for incumbent acting as Manager of Contracts, STEP Students and general,salary increases.
4. Increase in Administration and Finance other expenditures is due to one-time charges from Accommodation development for the remediation sub surface flooring at 1007 Century.
5. Increase in Ecological Service Administration salaries is due to one new approved FTE that was filled May 1, 2006.
6. Increase in Planning and Coordination salaries is due to two positions being filled, one in May 2006 and one in September 2006.
7. Increase in Planning and Coordination other expenditures is due to the signing of the GeoConnections contribution Agreement March 2007.
8. Increase in Groundwater Management salaries is due to offset by federal revenue and overtime paid out in 2006/07 that was not required in 2005/06.

Explanations:

9. Increase in Surface Water Management is due to the 2006/07 Estimates approval of funding for the Canada-Manitoba Agreement for Water Quantity surveys and resulting expenditures for 205 gauging stations.

10. Increase in Fisheries Administration salaries is due to STEP students.

11. Decrease in Fisheries Administration other expenditures is due to less Legal Fees for 2006/07.

12. Increase in Sport and Commercial Fishing Management other expenditures is due to increased travel and meetings for Cedar Lake.

13. Decrease in Office of Drinking Water other expenditures is due to higher lab costs in 2005/06 due to the Extension for Waiving Fees for Bacteriological Testing of Private Wells in Flood Impacted areas.

14. Increase in Water Licensing salaries is due to vacant positions filled and severance and vacation leave for retirements in 2006/07.

15. Decrease in Water Control Infrastructure salaries is due to severance and vacation leave and overtime paid in 2005/06.

16. Increase in Water Control Infrastructure other expenditures is due to increased vehicle costs and increased travel costs for inspection of various projects in The Pas and increased procurement and purchases.

17. Decrease in Regional Water Operations salaries is due to higher departmental salaries in 2005/06 and a position vacant in 2006/07.

18. Decrease in Regional Water Operations other expenditures is due to timing in processing Goods/Services.

19. Increase in Water Stewardship Initiatives is due to Hydraulic Model and LiDAR for Peguis/Fisher River First Nation Flood Protection and increased construction costs for the Spence Bridge for Peguis/Fisher River.

20. Prior to 2006/07 there was no budget for capital investment purposes. In 2006/07, general tangible capital assets, primarily equipment, were required for program delivery.

Table EX.2
FIVE YEAR EXPENDITURE AND STAFFING SUMMARY BY MAIN APPROPRIATION

for the fiscal years ended March 31, 2003 to March 31, 2007

		ACTUAL/*ADJUSTED ESTIMATES OF EXPENDITURE						ADJUSTED VOTE		MA ESTIM	
		2002/2003*		2003/2004*		2004/2005*		2005/2006		2006/20	
	Main Appropriation	FTEs	$(000s)	FTEs	$(000s)	FTEs	$(000s)	FTEs	$(000s)	FTEs	$(000s)
25-1	Administration and Finance	9.00	597.7	12.00	744.6	16.00	1,153.2	16.00	1,351.6	16.00	1,374.3
25-2	Ecological Services	118.99	13,967.3	119.19	14,230.6	118.19	11,508.6	116.19	12,004.6	116.19	13,020.5
25-3	Infrastructure and Operations	45.20	3,839.9	41.50	3,590.4	42.50	5,774.3	41.50	4,493.1	41.50	4,921.3
25-4	Water Stewardship Initiatives						469.0		2,565.3		3,783.4
25-6	Community and Watershed Assistance		3,975.0		3,975.0		3,755.0		3,758.0		3,975.0
25-7	Minor Capital Projects		603.4		958.9		573.6		262.4		284.7
25-5	Costs Related to Capital Projects		284.1		224.4		213.8		227.7		262.4
	Total Appropriations (BA25)	173.19	23,267.4	172.69	23,723.9	176.69	23,447.5	173.69	24,662.7	173.69	27,621.6

*Adjusted figures reflect historical data on a comparable basis in those appropriations affected by re-organization, during the years under review.

WATER STEWARDSHIP – Performance Reporting Table

The 2005-2006 reporting year is the first year that a standardized Performance Measurement section appeared in Departmental Annual Reports. This section is another step in our process to provide Manitobans with a more complete picture of the activities of government and their impacts on the province. That process was begun in 2005 with the release of the document, *Reporting to Manitobans on Performance, 2005 Discussion Document*, which can be found at www.gov.mb.ca/finance/performance.

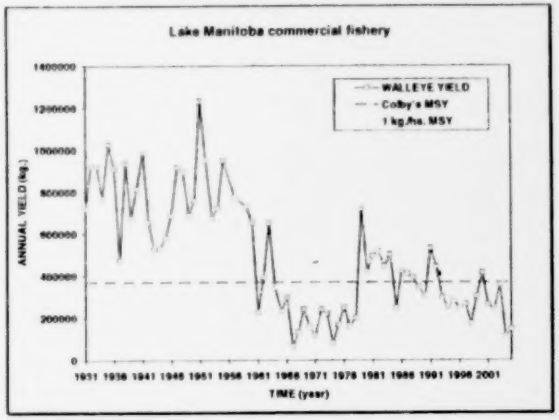
Performance indicators in departmental Annual Reports are intended to provide Manitobans with meaningful and useful information about government's activities, complementary to financial results. Some measures incorporate data collected by the provincial government, while others show data that are collected by external agencies. A range of existing, new and proposed measures may be reported in subsequent years, as the process continues to evolve.

What is being measured and how?	***Why is it important to measure this?***	***Where are we starting from?***	***What is the most recent available value for this indicator?***	***What is the trend over time for this indicator?***	***Comments/recent actions/report links***
The status of fish stocks, by comparing commercial production of the most valuable fish species (i.e. walleye) against Maximum Sustainable Yield (MSY) estimates for four large commercial fisheries (Cedar Lake, Lake Manitoba, Lake Winnipeg and Lake Winnipegosis).	It is important to measure the status of these fish stocks because they are an indicator of aquatic ecosystem health and economic opportunity for fishers. It is important to track production of highly sought species against estimated MSY, because the harvest of consistently valuable species is reflective of abundance (less influenced by market factors; i.e. price paid).	The baseline measure for this is the annual Maximum Sustainable Yield (MSY) for each lake. **Lake Winnipegosis** – 263,320 kgs (walleye) **Lake Manitoba** – 907,200 kgs (walleye, sauger) **Cedar Lake** – 496,600 kgs (walleye, sauger,	See Graphs below	1. **Lake Winnipegosis** – stocks considered collapsed. 2. **Lake Manitoba** – production has experienced long term decline. 3. **Cedar Lake** – recent increases in production reflect 5 year closure due to decreased fishery. 4. **Lake Winnipeg** – production at record levels but high nutrients and invasive species leaves concerns for stability.	**Lake Winnipegosis** – The Minister has formally responded to the recommendations of the Lake Winnipegosis Management Board and an action plan is under development. **Lake Manitoba** – a lake stewardship board has been established to review fisheries management plans. **Cedar Lake** – Recovery of fish stocks is not complete. Fishery continues to be adjusted, in accordance with the management plan implemented in June 2006. **Lake Winnipeg** –

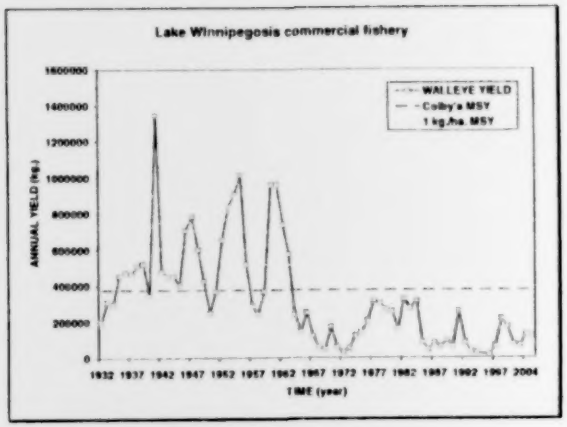
What is being measured and how?	*Why is it important to measure this?*	*Where are we starting from?*	*What is the most recent available value for this indicator?*	*What is the trend over time for this indicator?*	*Comments/recent actions/report links*
		goldeye, whitefish) – tolerance: not more than 300,000 can be walleye **Lake Winnipeg** – 6,200,000 kgs (walleye, sauger, whitefish)			Monitoring efforts on Lake Winnipeg will continue because of available staff resources are now in place.

Commercial production and maximum sustainable yield (MSY) on four large Manitoba fisheries.

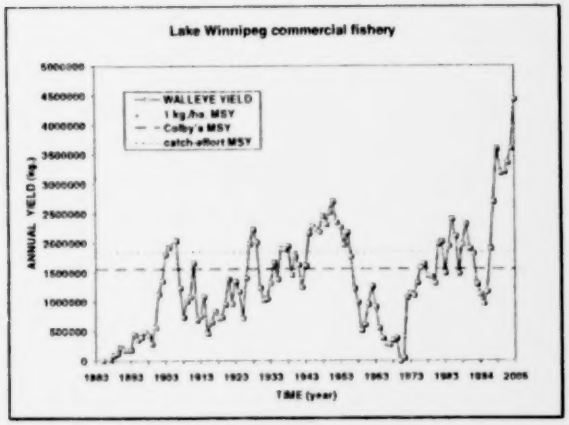
Lake Manitoba



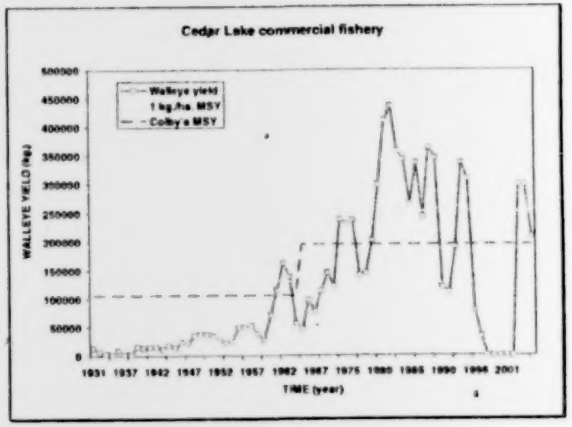
Lake Winnipegosis



Lake Winnipeg



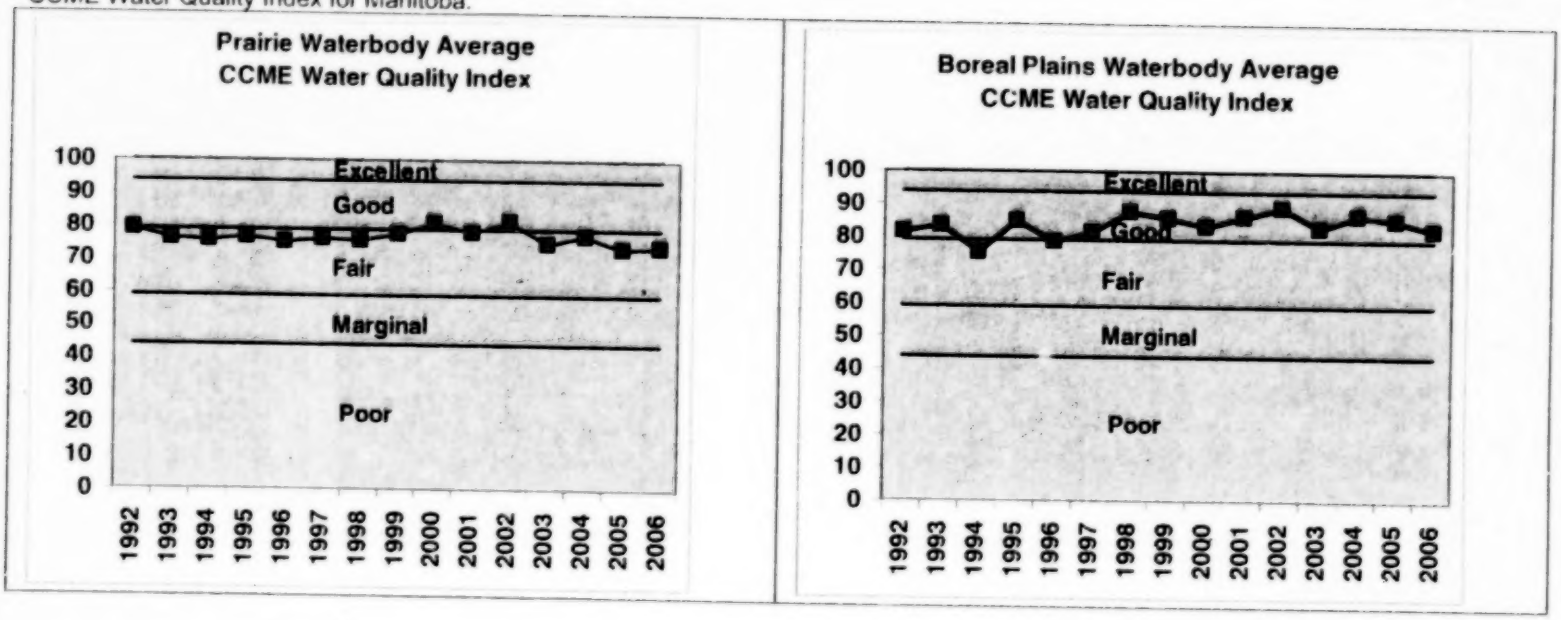
Cedar Lake

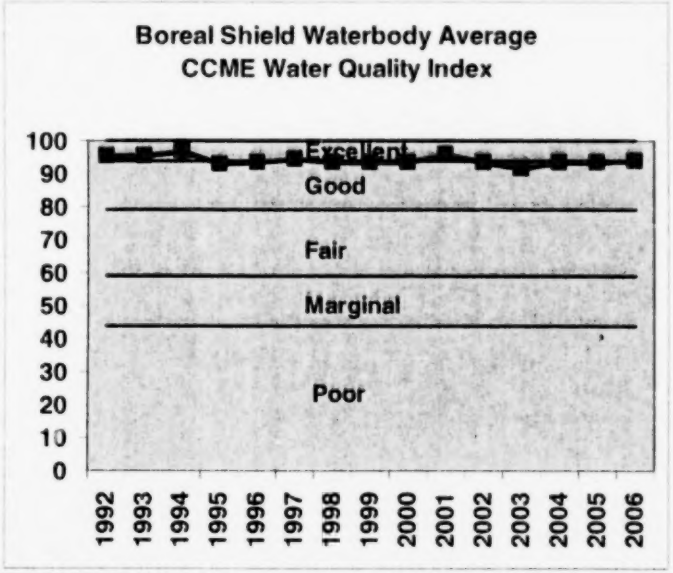


What is being measured and how?	*Why is it important to measure this?*	*Where are we starting from?*	*What is the most recent available value for this indicator?*	*What is the trend over time for this indicator?*	*Comments/recent actions/report links*
Water quality in Manitoba, by assessing water quality data using the CCME (Canadian Council of Ministers of the Environment) Water Quality Index.	It is important to measure water quality because we want to protect drinking water, fish and other aquatic life, recreation, and other important water uses.	Water quality has been tested at many rivers, streams and lakes since the early 1970s. The Water Quality Index has been calculated for about 40 to 50 sites since 1992.	The latest data we have is for 2006. Within the Prairie Ecozone, the CCME Water Quality Index Value was 74 or of "fair" quality. Within the Boreal Plains, the CCME Water Quality Index Value was 83 or of "good" quality. Within the Boreal Shield Ecozone, the CCME Water Quality Index Value was 94 or of "good" quality.	The Water Quality Index in Manitoba has been stable since 1992 (see graphs below).	This was one of the Performance Measures reported on p. 80 of the *Report to Manitobans on Performance - 2005 Discussion Document* prepared by Manitoba Finance, which can be found at http://www.gov.mb.ca/finance/mbperformance/index.html This Water Quality Index compares a number of important water quality parameters against established standards, objectives, or guidelines. When compared over time, it provides a useful indicator of how water quality may be changing. Annual data from 40 to 50 consistently monitored sites are used in the WQI. **Excellent**: (CCME WQI Value 95-100) - water quality is protected with a virtual absence of threat or impairment; conditions very close to natural or pristine levels. These index values can only be obtained if all measurements are within objectives virtually all of the time. **Good**: (CCME WQI Value 80-94) - water quality is protected with only a minor degree of threat or impairment; conditions

What is being measured and how?	*Why is it important to measure this?*	*Where are we starting from?*	*What is the most recent available value for this indicator?*	*What is the trend over time for this indicator?*	*Comments/recent actions/report links*
					rarely depart from natural or desirable levels. **Fair**: (CCME WQI Value 65-79) - water quality is usually protected but occasionally threatened or impaired; conditions sometimes depart from natural or desirable levels. **Marginal**: (CCME WQI Value 45-64) - water quality is frequently threatened or impaired; conditions often depart from natural or desirable levels. **Poor**: (CCME WQI Value 0-44) - water quality is almost always threatened or impaired; conditions usually depart from natural or desirable levels.

CCME Water Quality Index for Manitoba.



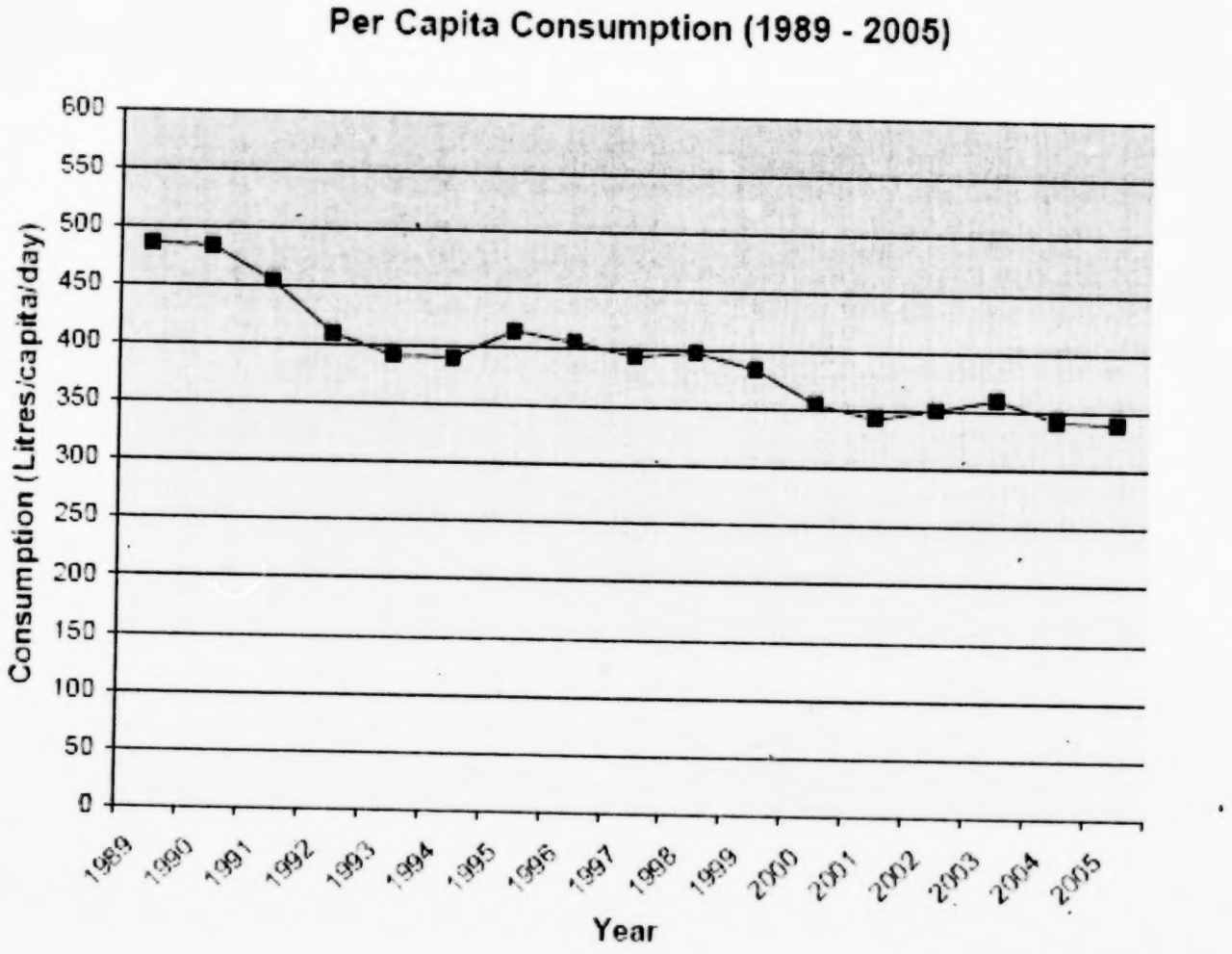

Boreal Shield Waterbody Average
CCME Water Quality Index
100
90
80
70
60
50
40
30
20
10
0
Excellent
Good
Fair
Marginal
Poor
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006

What is being measured and how?	*Why is it important to measure this?*	*Where are we starting from?*	*What is the most recent available value for this indicator?*	*What is the trend over time for this indicator?*	*Comments/recent actions/report links*
The effectiveness of our flood risk management in vulnerable communities by measuring the number of existing Red River Valley homes and communities that are protected to the "1997 plus 2 feet" flood protection level.	It is important to measure the effectiveness of flood risk management, because Manitobans face risks from both surplus and scarcity of water which impacts economic prosperity and human health and security.	The baseline measure for this is the number of buildings and communities protected to the "1997 plus 2 feet" flood level in 1995/6. 600 homes, farms and businesses were so protected by 1995/6. Four communities, or significant portions of those communities, were so protected by 1995/96, while others were protected to a lower standard.	Since 1997, 1,820 homes, farms, and businesses in the Red River Valley were individually flood protected to the "1997 plus 2 feet" flood level, resulting in about 95% of such developments being protected. In addition, 14 communities in the Red River Valley have been protected to the "1997 plus two feet" flood level.	Improving each year.	• With the Administration of the Water Resources Administration Act, new development within the Red River valley must comply with the "1997 plus 2 foot" flood protection level. • Ralls Island and Deloraine flood protection works pending. • Flood pump capacity is being significantly increased in the Red River Valley at Rosenort, and is being planned in The Pas at the Mile 14 Pump station. Upgraded controls were installed at The Town of The Pas Pump station to increase pumping capacity under certain conditions. Pump station trash racks have been designed to increase worker safety and decrease pump station down time. • Existing flood risk mapping is being assessed and updated to identify properties at risk. • Joint studies with Federal Government to increase the capability of the Shellmouth Dam and Reservoir are well underway with new piezometers being installed during the next few weeks.

What is being measured and how?	*Why is it important to measure this?*	*Where are we starting from?*	*What is the most recent available value for this indicator?*	*What is the trend over time for this indicator?*	*Comments/recent actions/report links*
					• Red River Floodway expansion is underway and on target time-wise. • For the spring of 2006 and 2007, there were no dike failures and all dikes functioned as designed. However, unstable river embankments at St. Jean Dike and Emerson Dike that may threaten the dikes are being installed with slope indicators to monitor the slope movement. • The operation of Shellmouth Dam and Portage Diversion minimized flooding along the Assiniboine River. Operation of the Red River Floodway significantly reduced flood peaks within Winnipeg for 2005 and 2006.

What is being measured and how?	*Why is it important to measure this?*	*Where are we starting from?*	*What is the most recent available value for this indicator?*	*What is the trend over time for this indicator?*	*Comments/recent actions/report links*
The environmental footprint related to water use and the effectiveness of our water awareness programs in Manitoba by measuring per capita water consumption for both industrial and domestic uses (Winnipeg, Brandon and Portage). Currently this is only a measure of our urban footprint and urban user awareness.	It is important to measure our environmental footprint and effectiveness of awareness programs because we want to reduce our environmental footprint; per capita water usage has an impact on our infrastructure needs; intensity of use of water is a key environmental indicator (Organization for Economic Cooperation and Development).	The baseline measure for overall water consumption is only available from the City of Winnipeg, which was 495.2 L/c/d in 1988.	Per capita water use for the City of Winnipeg for 2005 was 340.0 litres / per capita / per day (l/c/d); 204 l/c/d residential use; 129.2 l/c/d commercial/industrial; 27.2 l/c/d loss. Per capita water use for the City of Portage la Prairie for 2005 was 969 l/c/d, (all uses including Simplot and McCains plants' 583 l/c/d); 678 l/c/d commercial /industrial; 242 l/c/d residential; 48 l/c/d loss. Per capita water use for the City of Brandon for 2006 438.6 l/c/d; 240.8 l/c/d residential; 175 l/c/d for commercial/industrial; 43 l/c/d loss.	The trend in overall water consumption (both residential and commercial) for the City of Winnipeg has been steadily declining from a high of 495.2 L/c/d in 1988, to 340.0 L/c/d in 2005 (see graph below). No trends in overall water consumption for Brandon or Portage la Prairie are available at this time.	The Organization for Economic Cooperation and Development, in their reference paper OECD *Environmental Indicators – Development, Measurement and Use*, identifies the intensity of use of water as a key environmental indicator. This indicator links with national and other international initiatives. Environment Canada and other provinces identify and track water use as a measure of effectiveness of programs and activities to educate and inform the public of the importance and value of water. This indicator also provides a measure of the effectiveness of demand management programs directed at increasing water supply. While this is currently only a measure of our urban water use and awareness, we will work towards expanding this measure to include all of Manitoba.

Per Capita Water Consumption for the City of Winnipeg (Litres per day)



What is being measured and how?	***Why is it important to measure this?***	***Where are we starting from?***	***What is the most recent available value for this indicator?***	***What is the trend over time for this indicator?***	***Comments/recent actions/report links***
The safety of Manitoba's Public, Semi-public and private drinking water supplies by measuring the adequacy, effectiveness and timeliness of water quality sampling undertaken, to determine that Canadian Drinking Water Quality Standards are met at all times.	It is important to measure the safety of Manitoba's drinking water to minimize the risks to Public Health through consuming water that may contain: • bacteria, virus or protozoa that may cause illness and; • chemical contaminants which may cause negative health outcomes such as increased risk of cancer.	The baseline measure of all water systems in Manitoba that comply with the required testing schedule is 72% compliance in 2003.	All systems are being monitored on an on-going basis to ensure safety of water supplies. To date, 90% of all Public systems currently comply with the required testing schedule. These systems provide the water to 90% of Manitoba's population. For semi-public systems, testing schedules will be enforceable as of March 11, 2008.	74% of Manitobans living in communities of 3000 or more served by a piped water system. These systems are >95% compliant with testing schedules. 21% of Manitobans are served by water systems that are between 85 and 95% compliant with testing schedules. An estimated 5% of Manitobans rely on water systems that are less than 85% compliant with testing schedules. With the Drinking Water Quality Standards Regulation coming into effect on March 1, 2007 greater responsibility is being placed on owners and operators of water systems to monitor water quality, and recognize, report and respond to water quality incidents.	For more information, see the Office of Drinking Water web site. http://www.gov.mb.ca/waterstewardship/odw/index.html Technical documents are posted on the web site. An Annual Report is required under the *Drinking Water Safety Act*. • Drinking water safety is protected through the use of construction permits and operating licences for water suppliers, scheduled and non-scheduled inspection of facilities, scheduled quality monitoring and ongoing utility and public education. • Licencing and permitting ensures that minimum engineering and construction standards are met or exceeded. • Inspections ensure that minimum operational performance and water quality standards are met by utilities and, that there is ongoing pubic reporting and accountability. • All of the activities focus on the importance of public health protection through the assurance of water supply quality and reliability and maintain public confidence.

GESTION DES RESSOURCES HYDRIQUES MANITOBA – Tableau d'information sur le rendement 2006-2007

L'exercice 2005-2006 est la première année où les rapports annuels du ministère comprennent une section d'information sur le rendement standardisée. Il s'agit d'une autre étape du processus visant à ce que les Manitobains aient un meilleur aperçu des activités du gouvernement et des répercussions de celles-ci sur la province. Ce processus a été amorcé en 2005 avec la publication du document *Rapport aux Manitobains sur le rendement — Document de travail 2005*, qui se trouve sur Internet à : www.gov.mb.ca/finance/mbperformance/perf02.fr.html.

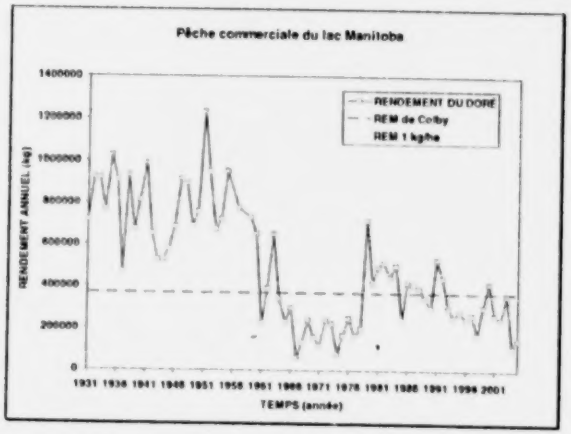
Les indicateurs de rendement dans les rapports annuels des ministères ont pour objectif de fournir aux Manitobains des renseignements valables et utiles sur les activités du gouvernement, en tant que complément des résultats financiers. Certains renseignements incorporent des données recueillies par le gouvernement provincial, alors que d'autres montrent des données rassemblées par des organismes externes. À mesure que le processus évolue, un éventail de mesures actuelles, nouvelles ou proposées pourrait être inclus dans le rapport dans les années à venir.

Indicateur et méthode utilisée	***Importance de l'indicateur***	***Point de départ***	***Valeurs les plus récentes***	***Tendance à long terme***	***Notes, mesures récentes ou liens vers des rapports***
La situation des stocks de poissons, mesurée d'après une comparaison de la production commerciale des espèces les plus précieuses (p. ex., le doré jaune) avec le rendement équilibré maximal (REM) prévu de quatre grandes pêcheries commerciales (lac Cedar, lac Manitoba, lac Winnipeg et lac Winnipegosis).	Il est important de mesurer la situation des stocks de poissons, car elles constituent un indicateur de la santé de l'écosystème aquatique ainsi que des possibilités économiques pour les pêcheurs. Il importe également de comparer la production des espèces très recherchées au REM prévu, car la récolte d'espèces qui demeurent précieuses est un signe d'abondance (elle est moins influencée par les facteurs du marché, comme le prix déboursé).	La mesure de référence utilisée ici est le rendement équilibré maximal (REM) de chacun des lacs. **Lac Winnipegosis** – 263 320 kg (doré jaune) **Lac Manitoba** – 907 200 kg (doré jaune, doré noir) **Lac Cedar** – 496 600 kg (doré jaune, doré noir, laquaiche aux yeux d'or, corégone) – tolérance : au plus 300 000 kg de doré jaune **Lac Winnipeg** – 6 200 000 kg (doré jaune, doré noir, corégone)	Voir les graphiques ci-après.	1. **Lac Winnipegosis** – On constate un effondrement des stocks. 2. **Lac Manitoba** – La production diminue depuis longtemps. 3. **Lac Cedar** – Les récentes hausses dans la production sont le résultat de la fermeture du lac pendant 5 ans à la suite d'une réduction de la pêche. 4. **Lac Winnipeg** – La production atteint des niveaux sans précédent, mais la grande quantité d'éléments nutritifs et	**Lac Winnipegosis** – Le ministre a donné sa réponse officielle aux recommandations du Conseil de gestion du lac Winnipegosis et un plan d'action est en cours d'élaboration. **Lac Manitoba** – Un conseil de gérance du lac a été mis sur pied pour examiner les plans de gestion des pêches. **Lac Cedar** – Le rétablissement des stocks de poissons n'est pas terminé. On continue d'apporter les modifications recommandées, en conformité avec le nouveau plan de gestion des pêches mis en œuvre en juin 2006. **Lac Winnipeg** – La surveillance du lac Winnipeg se poursuit grâce aux nouvelles ressources

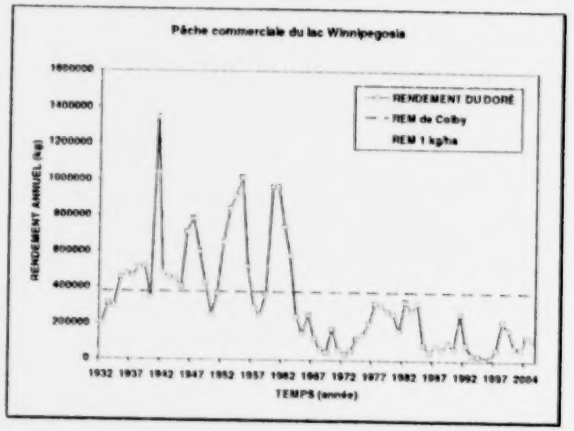
Indicateur et méthode utilisée	*Importance de l'indicateur*	*Point de départ*	*Valeurs les plus récentes*	*Tendance à long terme*	*Notes, mesures récentes ou liens vers des rapports*
				d'espèces envahissantes menacent l'équilibre du lac.	humaines en place.

Production commerciale et rendement équilibré maximal (REM) de quatre grandes pêcheries du Manitoba

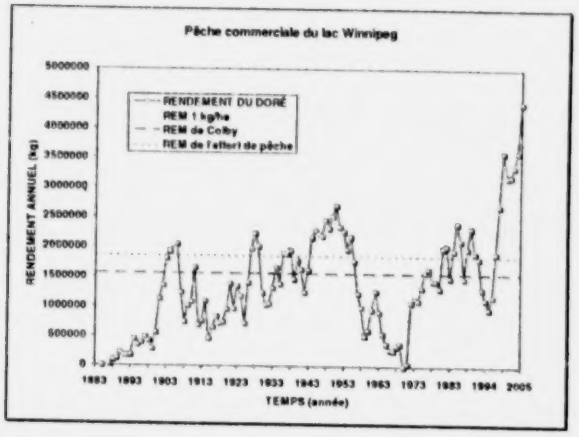
Lac Manitoba



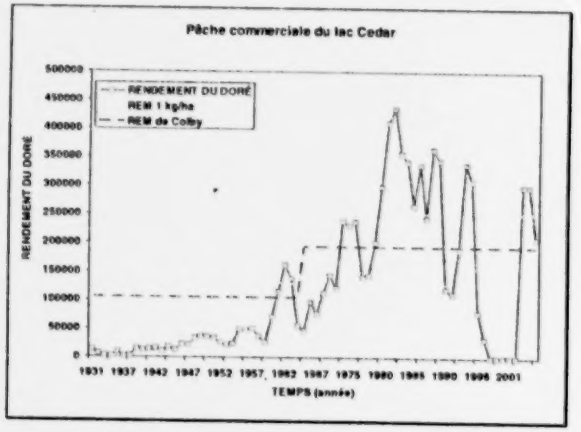
Lac Winnipegosis



Lac Winnipeg

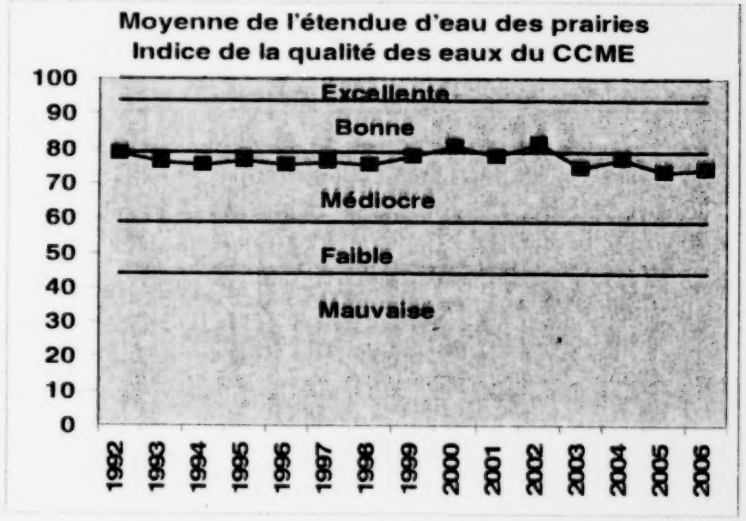


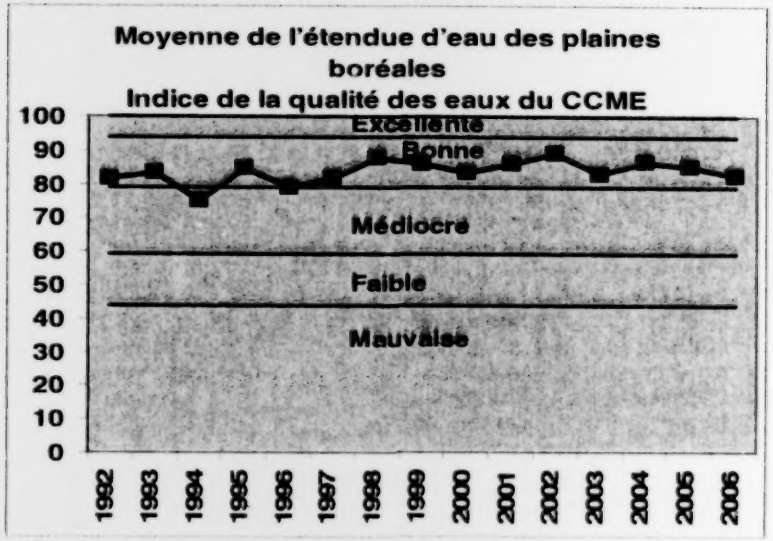
Lac Cedar

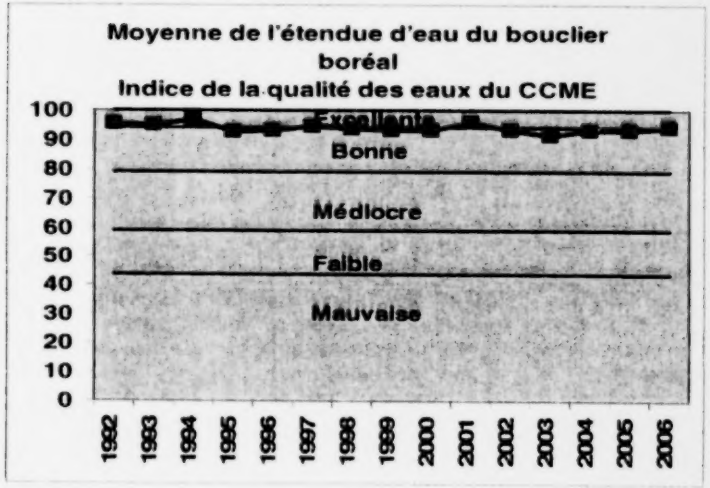


Indicateur et méthode utilisée	*Importance de l'indicateur*	*Point de départ*	*Valeurs les plus récentes*	*Tendance à long terme*	*Notes, mesures récentes ou liens vers des rapports*
La qualité de l'eau au Manitoba, mesurée à partir des données servant à établir l'indice de la qualité des eaux du CCME (Conseil canadien des ministres de l'environnement).	Il est important de mesurer la qualité de l'eau si l'on veut protéger l'eau potable, les poissons et les autres formes de vie aquatique, les loisirs et d'autres utilisations importantes de l'eau.	La qualité de l'eau d'un grand nombre de rivières, de ruisseaux et de lac a été testée depuis le début des années 1970. L'indice de la qualité des eaux est établi d'après les prélèvements effectués dans 40 à 50 sites depuis 1991.	Les données de 2006 sont les dernières données dont on dispose. Dans l'écozone des prairies, l'indice de la qualité des eaux du CCME était de 71, ce qui représente une qualité « passable ». Dans l'écozone des plaines boréales, l'indice de la qualité des eaux du CCME était de 78, ce qui représente une qualité « passable ». Dans l'écozone du bouclier boréal, l'indice de la qualité des eaux du CCME était de 87, ce qui représente une « bonne » qualité.	Au Manitoba, l'indice de la qualité des eaux est stable depuis 1991 (voir les graphiques ci-après).	Cet indicateur figure à la page 80 du Rapport aux Manitobains sur le rendement – Document de travail 2005, préparé par Finances Manitoba et consultable en ligne à l'adresse suivante : www.gov.mb.ca/finance/mbperformance/performance.fr.pdf. L'indice de la qualité des eaux (IQE) compare différents paramètres essentiels de la qualité de l'eau à des normes établies, à des objectifs ou à des lignes directrices. Évalué sur une longue période, il constitue un indicateur utile de l'évolution de la qualité de l'eau. L'IQE est établi à partir des données annuelles recueillies de façon pratiquement constante dans 40 à 50 sites. **Excellent** : (Valeur IQE du CCME de 95 à 100) – La qualité des eaux est protégée; elle n'est pratiquement pas menacée ou dégradée; les conditions sont très proches de l'état naturel ou vierge. Ces valeurs-indices ne sont attribuables que si la totalité des mesures correspond presque toujours aux objectifs. **Bonne** : (Valeur IQE du CCME de 80 à 94) – La qualité des eaux est protégée; elle est faiblement menacée ou dégradée; les conditions s'éloignent rarement des niveaux naturels ou désirables. **Passable** : (Valeur IQE du CCME de 65 à 79) – La qualité des eaux est généralement protégée; elle est occasionnellement menacée ou dégradée; les conditions s'éloignent parfois des niveaux naturels ou désirables. **Médiocre** : (Valeur IQE du CCME de 45 à 64) – La qualité des eaux est souvent menacée ou dégradée; les conditions s'éloignent souvent des niveaux naturels ou désirables. **Mauvaise** : (Valeur IQE du CCME de 0 à 44) – La qualité des eaux est presque toujours menacée ou dégradée; les conditions s'éloignent généralement des niveaux naturels ou désirables.

Indice de la qualité des eaux du CCME pour le Manitoba





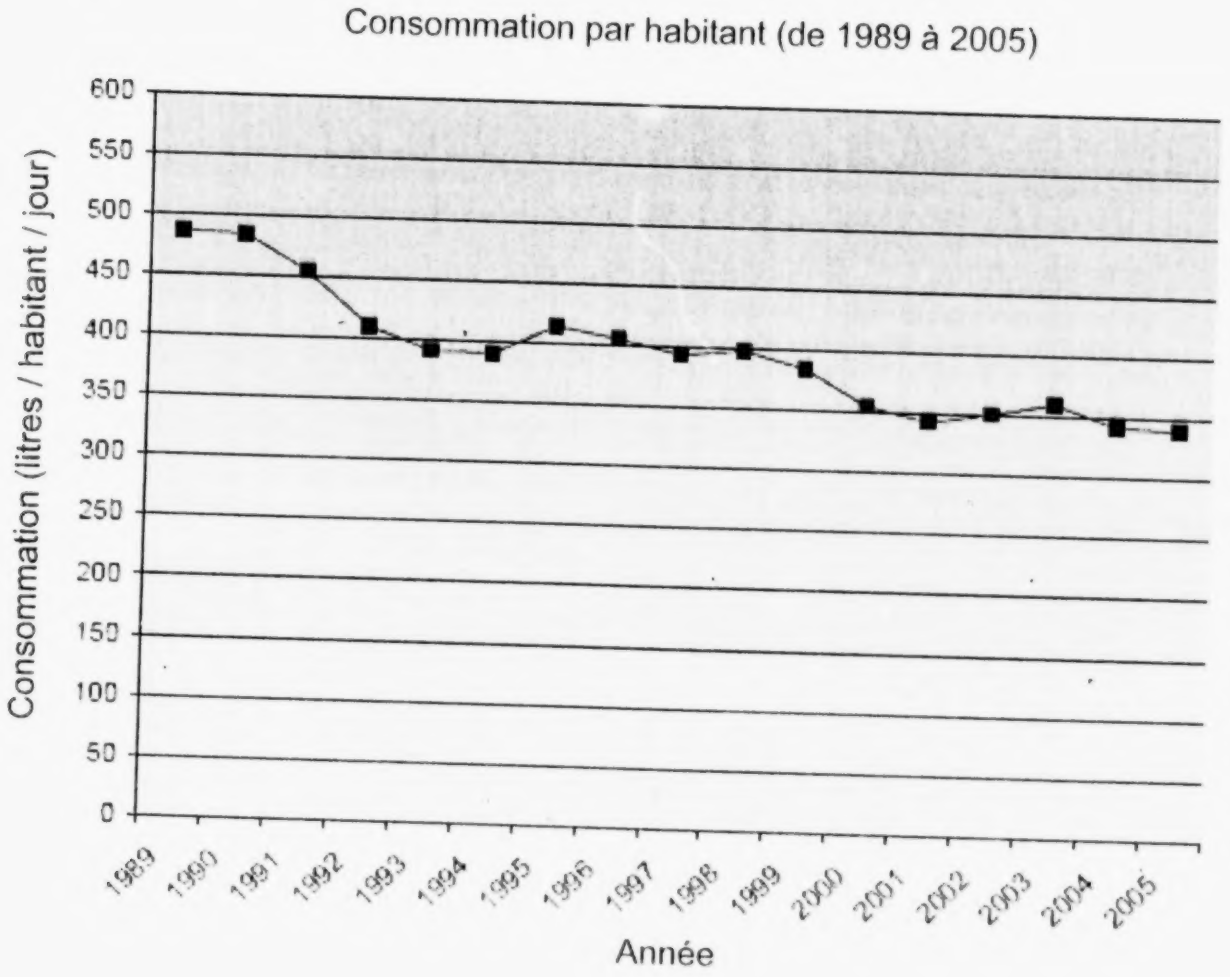


Indicateur et méthode utilisée	*Importance de l'indicateur*	*Point de départ*	*Valeurs les plus récentes*	*Tendance à long terme*	*Notes, mesures récentes ou liens vers des rapports*
L'efficacité de la gestion des risques d'inondation dans les collectivités vulnérables, mesurée d'après le nombre de domiciles et de collectivités de la vallée de la rivière Rouge élevés à un niveau correspondant à celui des inondations de 1997, plus 2 pieds.	Il est important de mesurer l'efficacité de la gestion des risques d'inondation, car les Manitobains peuvent être victimes à la fois des surplus et de la rareté de l'eau, qui nuisent à la prospérité ainsi qu'à la santé et à la sécurité de la population.	La mesure de référence utilisée ici correspond au nombre de bâtiments et de collectivités élevés à un niveau correspondant à celui des inondations de 1997, plus 2 pieds en 1995-1996. Six cents domiciles, fermes et commerces étaient à ce niveau en 1995-1996. Quatre collectivités ou une grande partie de celles-ci étaient à ce niveau en 1995-1996, tandis que les autres étaient situées à un niveau inférieur.	Depuis 1997, 1820 domiciles, fermes et commerces de la vallée de la rivière Rouge (soit 95 %) ont été élevés à un niveau correspondant à celui des inondations de 1997, plus 2 pieds. De plus, 14 collectivités de la vallée de la rivière Rouge ont également été élevées à un niveau correspondant à celui des inondations de 1997, plus 2 pieds.	La situation s'améliore d'année en année.	• Dans le cadre de l'administration de la *Loi sur l'aménagement hydraulique*, toute nouvelle construction dans la vallée de la rivière Rouge doit se trouver à un niveau correspondant à celui des inondations de 1997, plus 2 pieds. • Des travaux d'amélioration des ouvrages de protection contre les inondations de Ralls Island et de Deloraine sont en cours. • On a accru de façon importante la capacité de pompage en cas d'inondations dans la vallée de la rivière Rouge, à Rosenort, et on étudie la possibilité d'augmenter la capacité de la station de pompage située au 14e mille à The Pas. De nouveaux dispositifs de contrôle ont été installés à la station de pompage de The Pas afin d'accroître la capacité de pompage dans certaines conditions. Entre autres, les grilles à barreaux de la station de pompage visent à renforcer la sûreté des travailleurs et à réduire le temps d'arrêt de la station. • Les cartes des zones exposées aux inondations font l'objet d'une étude et d'une mise à jour afin de préciser les biens vulnérables. • Les études menées conjointement avec le gouvernement fédéral dans le but d'accroître les capacités du barrage et du réservoir de Shellmouth avancent bien. De nouveaux piézomètres seront installés au cours des prochaines semaines. • L'agrandissement du canal de dérivation de la rivière Rouge respecte les délais prévus.

Indicateur et méthode utilisée	*Importance de l'indicateur*	*Point de départ*	*Valeurs les plus récentes*	*Tendance à long terme*	*Notes, mesures récentes ou liens vers des rapports*
					• Au printemps de l'exercice 2006-2007, toutes les digues ont fonctionné adéquatement et il n'y a eu aucun bris. Toutefois, les remblais instables en bordure des barrages de St. Jean et d'Emerson pourraient en menacer la sûreté, et des indicateurs de descente ont été installés pour surveiller l'évolution de la pente. • L'exploitation du barrage de Shellmouth et du système de dérivation de Portage a réduit les inondations le long de la rivière Assiniboine. L'exploitation du canal de dérivation de la rivière Rouge a grandement réduit les débits de pointe de crue à Winnipeg en 2005 et en 2006.

Indicateur et méthode utilisée	*Importance de l'indicateur*	*Point de départ*	*Valeurs les plus récentes*	*Tendance à long terme*	*Notes, mesures récentes ou liens vers des rapports*
L'empreinte environnementale associée à l'utilisation de l'eau et l'efficacité des programmes de sensibilisation à la question de l'eau au Manitoba, mesurées d'après la consommation d'eau par habitant, tant pour des usages domestiques qu'industriels (à Winnipeg, à Brandon et à Portage-la-Prairie). À l'heure actuelle, on mesure uniquement l'empreinte et la sensibilisation des usagers en milieu urbain.	Il est important de mesurer l'empreinte environnementale et l'efficacité des programmes de sensibilisation, car : • on vise la réduction de l'empreinte environnementale; • la consommation d'eau par habitant influence les besoins en infrastructures; • l'intensité de l'utilisation des ressources en eau est un des indicateurs environnementaux clés de l'OCDE (Organisation de coopération et de développement économiques).	On possède uniquement une mesure de référence pour la consommation d'eau globale de la Ville de Winnipeg, et elle était de 495,2 litres par habitant par jour (l/h/j) en 1988.	En 2005, à Winnipeg, la consommation d'eau était de 340 l/h/j, de 204 l/h/j pour l'usage résidentiel seulement, et de 129,2 l/h/j pour les usages commerciaux et industriels. On y accusait une perte de 27,2 l/h/j. En 2005, à Portage-la-Prairie, la consommation d'eau était de 969 l/h/j (tous usages combinés, y compris la consommation de 583 l/h/j des usines de Simplot et de McCain), de 678 l/h/j pour les usages commerciaux et industriels et de 242 l/h/j pour l'usage résidentiel. On y accusait une perte de 48 l/h/j. En 2006, à Brandon, la consommation d'eau était de 438 l/h/j, de 240,8 l/h/j pour l'usage résidentiel seulement, et de 175 l/h/j pour les usages commerciaux et industriels. On y accusait une perte de 43 l/h/j.	La tendance en ce qui concerne la consommation d'eau globale (résidentielle et commerciale) pour la ville de Winnipeg indique une diminution constante. Elle est passée de 495,2 l/h/j en 1988 à 340 l/h/j en 2005 (voir le graphique ci-après). À ce jour, aucune tendance ne peut être établie dans la consommation d'eau globale à Brandon et à Portage-la-Prairie.	Dans le document Indicateurs clés d'environnement de l'OCDE, l'Organisation de coopération et de développement économiques (OCDE) définit l'intensité de l'utilisation des ressources en eau comme étant un indicateur clé d'environnement. Cet indicateur permet d'établir des liens avec des projets nationaux et internationaux. Environnement Canada et les provinces se servent de l'utilisation des ressources en eau pour mesurer l'efficacité des programmes et des activités de sensibilisation de la population à l'importance et à la valeur de l'eau. Cet indicateur permet également de mesurer l'efficacité des programmes de régulation de la demande axés sur l'augmentation de l'approvisionnement en eau. Actuellement, on ne mesure la consommation d'eau et la sensibilisation à cet égard qu'en milieu urbain, mais on s'emploiera à étendre cette mesure à tout le Manitoba.

Consommation d'eau par habitant pour la ville de Winnipeg (nombre de litres par jour)



Indicateur et méthode utilisée	*Importance de l'indicateur*	*Point de départ*	*Valeurs les plus récentes*	*Tendance à long terme*	*Notes, mesures récentes ou liens vers des rapports*
La salubrité des installations d'approvisionnement en eau potable publiques, semi-publiques et privées du Manitoba, mesurée par un examen de l'à-propos, de l'efficacité et de l'opportunité des analyses de la qualité de l'eau, pour vérifier l'application des Recommandations pour la qualité de l'eau potable au Canada.	Il est important de mesurer la salubrité de l'eau potable du Manitoba afin de réduire les risques pour la santé publique que pourrait causer la consommation d'eau contenant : des bactéries, des virus ou des protozoaires pathogènes; des contaminants chimiques qui pourraient entraîner des problèmes de santé tels qu'un risque accru de cancer.	Le pourcentage de référence quant au respect du calendrier des analyses obligatoires pour les systèmes d'alimentation en eau du Manitoba se situait à 72 % en 2003.	Pour en garantir la salubrité, tous les systèmes d'alimentation en eau sont inspectés régulièrement. À l'heure actuelle, 90 % des réseaux publics d'alimentation en eau desservant 90 % de la population du Manitoba respectaient le calendrier obligatoire des analyses. Un calendrier des analyses applicable aux systèmes semi-publics entrera en vigueur le 11 mars 2008.	74 % des Manitobains qui vivent dans des collectivités de 3 000 habitants et plus reçoivent leur eau par un système d'alimentation par canalisation. Ces systèmes sont inspectés conformément au calendrier des analyses dans une proportion de plus de 95 %. 21 % des Manitobains sont approvisionnés en eau par des systèmes inspectés conformément au calendrier des analyses dans une proportion de 85 à 95 %. On estime à 5 % la proportion de Manitobains approvisionnés en eau par des systèmes pour lesquels on respecte à moins de 85 % le calendrier des analyses. Entrant en vigueur le 1er mars 2007, le Règlement sur les normes de qualité de l'eau potable renforcera les exigences envers les propriétaires et les exploitants de systèmes d'alimentation en eau en ce qui concerne le contrôle de la qualité de l'eau, et la détection des incidents relatifs à la qualité de l'eau, leur divulgation et les mesures à prendre le cas échéant.	Pour de plus amples renseignements, consulter le site Web du Service de l'eau potable à l'adresse suivante : http://www.gov.mb.ca/waterstewardship/odw/index.html (en anglais seulement) Des documents techniques sont publiés sur ce site Web. La Loi sur la qualité de l'eau potable exige la présentation d'un rapport annuel. La qualité de l'eau potable est protégée grâce à l'obligation pour les propriétaires des réseaux d'alimentation en eau d'obtenir des permis de construire et des permis d'exploitation, aux inspections régulières et ponctuelles des installations, à la surveillance de la qualité selon le calendrier obligatoire et à l'éducation continue du public et du personnel des services publics. L'obligation d'obtenir une licence ou un permis assure au moins un respect minimum des normes en matière d'ingénierie et de construction. Les inspections garantissent un rendement minimal des opérations, ainsi que le respect de normes de qualité de l'eau et une obligation continue de faire rapport et de rendre des comptes au public. Toutes les activités sont axées sur l'importance de la protection de la santé publique, une protection qui passe par l'assurance de la qualité et de la fiabilité de l'approvisionnement en eau et par le maintien de la confiance du public.

LEGISLATION

The Conservation Agreements Act, C.C.S.M. chapter C173
The Conservation Districts Act, C.C.S.M. chapter C175
The Drinking Water Safety Act, C.C.S.M. chapter D101
The Dyking Authority Act, C.C.S.M. chapter D110
The Fisheries Act, C.C.S.M. chapter F90 [except Part III]
The Fishermen's Assistance and Polluters' Liability Act, C.C.S.M. chapter F100
The Ground Water and Water Well Act, C.C.S.M. chapter G110
The Manitoba Habitat Heritage Act, C.C.S.M. chapter H3
The Lake of the Woods Control Board Act, C.C.S.M. chapter L30
The Manitoba Natural Resources Transfer Act (as it relates to water and fisheries), C.C.S.M. chapter N30
The Natural Resources Agreement Act, 1938, C.C.S.M. chapter N40
An Act to ratify a certain Agreement between the Government of the Dominion of Canada and the Government of the Province of Manitoba, C.C.S.M. chapter N50
The Red River Floodway Act, C.C.S.M. chapter R2
The Water Power Act, C.C.S.M. chapter W60
The Water Protection Act, C.C.S.M. chapter W65
The Water Resources Administration Act, C.C.S.M. chapter W70
The Water Resources Conservation Act, C.C.S.M. chapter W72
The Water Rights Act, C.C.S.M. chapter W80
The Water Supply Commissions Act, C.C.S.M. chapter W100

and:

Manitoba Fishery Regulations made pursuant to section 43 of the *Fisheries Act* (Canada)

As per Schedule "Q", Order-In-Council 418/2006

Publications

Fisheries

Manitoba 2006 Angling Guide
A Profile of Manitoba's Commercial Fishery

Water

Assiniboine Delta Aquifer Management Plan (produced in partnership with 45 local stakeholder agencies).
Assiniboine River Water Quality Study. Lake of the Prairies to the City of Brandon
Stephenfield Lake Watershed Management Plan, June 2005 (Produced in partnership with 19 local stakeholder agencies)
Swan Lake Basin Management Plan (produced in partnership with 28 local stakeholder agencies).
Water Quality Assessment of Wekuslo Lake, Manitoba, Canada. (April 2005)